REQUEST FOR BIDS

NORTHWOOD SQUARE SITE AND STORAGE

529 8TH STREET NE AUBURN, WA 98002

RELEASED BY:



CAPITAL CONSTRUCTION DEPARTMENT 700 ANDOVER PARK WEST, SUITE C TUKWILA, WA 98188

BID DATES

ISSUANCE DATE: March 15, 2023

DUE DATE: April 5, 2023

TIME: 1:00PM



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A - SECTION

INFORMATIONAL FORMS

- A.1 Invitation to Bid
- A.2 Notice to All Bidders
- A.3 Instructions to Bidders for Contracts (form HUD 5369)
- A.4 Fair Housing / Accessibility Notice
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INVITATION FOR BID

DUE DATE: APRIL 5, 2023

The King County Housing Authority (KCHA) will accept bids from qualified general contractors to furnish labor, materials and necessary equipment to perform the following:

SCOPE OF WORK: NORTHWOOD SQUARE SITE AND STORAGE

Northwood Square was built in 1978, with an envelope upgrade completed in 2018. The resident population is a diverse population of families and children which will remain occupied throughout construction.

Storage Shed: Work will include demolishing 24 existing storage shed closets at the unit, including removal of roofing, siding, sheathing (T & G), and cutting concrete slabs. The new structure will include a new foundation, 2x4 wall framing, 2x6 rafters, roof shingles, exterior and interior sheathing, WRB, fiber cement siding, and trim. The new storage units will be framed with all associated hardware and PT materials as noted on plans to accommodate a 3'-0" x 6'-8" exterior door and hardware. The existing fire extinguisher cabinets will be salvaged and incorporated into the new wall framing. They will be recessed as noted on plan page A6.2.

Site Work: Work includes the removal of selected sidewalks, asphalt pavement, and landscaping to incorporate a new drainage system that will connect to the existing storm drain system. The Contractor will be responsible for removing existing chain link fencing to access the locations around the building. Any excavation performed during the day will be covered and secured at the end of each work day.

An ADA ramp, including handrails, will be installed at the south elevation of Building B (Manager's Office). A new ramp and stairs will be installed at the North Elevation laundry room. Each location will include removing and replacing existing siding, relocating the current recessed fire extinguisher cabinets, and infill framing as needed. The Contractor will be responsible for all forms, rebar, and vertical sheet waterproofing applied between existing buildings and new concrete. Refer to detail page A6.2

The selective asphalt areas noted on the plans will be removed and replaced to allow the connection of the new storm lines into the main storm drain connection as well as room to form new sidewalk areas. Pressure washing of the entire parking will be completed before the seal coat of the entire parking lot. Parking lot painting will include restriping, numbering, painting of ADA markings curb painting, and no-parking striping at the North end of Building B. The existing ADA signage will be salvage and reinstalled using Ulti-Mate perforated steel square sign posts. Posts will be set in concrete a minimum of 24" and 5' to center of sign. The existing wheel stops located outside the basketball court will be removed for seal coating and re-installed and painted to match the current condition. The Contractor must submit a phasing plan for KCHA approval and integrate it into the master schedule prior to work commencing. KCHA expects the site and landscaping to be fully restored at the completion of the project.

For complete scope, please see E.1 Scope of Work and Technical Specifications

DRAWINGS – PROJECT MANUAL DISTRIBUTION: Drawing and bid documents can be downloaded from: https://www.kcha.org/business/construction/open



PRE-BID CONFERENCE:

PRE-BID CONFERE	INCE:
Date:	March 22, 2023
Time:	11:00 AM
Jobsite Address:	529 8 th Street NE, Auburn, WA 98002
Notation:	Attendance of the Pre-Bid Site Visit is MANDATORY.
Questions /	Direct Questions, Requests or Clarification by Email or Fax to:
Contact Person:	Project Manager: Amy Kurtz
Contact I cristin	Email Address: Amyk@kcha.org
	Phone Number: 206-574-1283
	No Later Than: March 29, 2023
	10 Euler Than. Traten 27, 2025
Website Posting:	https://www.kcha.org/business/construction/open
website i osting.	All responses shall be in the form of Addenda
	All Addenda(s) will post As Occurs
	Plan Holder's List posts every Friday
BIDS ARE DUE:	
Date:	April 5, 2023
Time:	1:00 PM
Address:	King County Housing Authority
0.1	600 Andover Park West, Tukwila, WA 98188
Submittal Procedure:	Envelope MUST BE:
	a. Sealed
	b. List Name and Address of your Firm/Company
	c. List Due Date and Time
	d. List Project Name:
	NORTHWOOD SQUARE SITE AND STORAGE
	e. Mailing / Shipping Package or Wrapping must also be marked with this
	information.
KCHA Process:	All Bids MUST BE Time and Date Stamped at King County Housing
	Authority's Central Campus by the above Due Date and Time.
	a. No Bids will be accepted after that Date and Time.
	b. No Bids Faxed or Emailed will be accepted.
	c. Bids should be dropped off at the front desk at
	600 Andover Park West, Tukwila, WA 98188.
	d. Bids will be accepted between NOON – 1:00PM ONLY .
	e. A KCHA representative will be present at the front desk to time stamp
	bids.
	f. There will be NO PUBLIC READING of the bids.
	g. At 1:00PM bidding will be closed and KCHA staff (project manager,
	project specialist and a department manager acting as witness) will
	tabulate the bids and notify bidders by email of the bid results.
	h. **NOTE: Contractors have the option to mail in bids, but bids must be
	received by the deadline of 1:00PM. KCHA does not recommend
	mailing in bids due to possible complications or difficulties that may
	arise with the mail delivery.
	and which the multi-derivery.



BID BOND OR CERTIFIED CHECK:

Amount:	Five (5%) Percent of the Total bid must accompany Each Bid greater than one
	hundred fifty (\$150,000) dollars.
Payable to:	King County Housing Authority
Process:	Bid Bond or Certified Check will be returned to the Unsuccessful Bidders within
	Ten (10) Days after the Contract Award.
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BONDS MUST BE ORIGINAL, NO PHOTOCOPIES OR SCANNED BONDS WILL BE ALLOWED

COVID-19 REQUIRED COMPLIANCE

Contractor's employees and all sub-contractors' employees will be required to wear a mask if they are in a building or a resident's unit. Contractor shall report to KCHA any COVID positive or exposed employees so KCHA can determine if any follow-up is required. All sub-contractors are to report any COVID positive or exposed employees to the Contractor.

ASSURANCE OF COMPLETION:

Projects valued over one hundred fifty thousand (\$150,000) dollars **require** a one hundred (100%) percent Performance and Payment Bond. (See Section C – Contract Documents)

BONDING CAPACITY:

Provide **with your bid proposal**, a written statement from the contractor's bonding agent of the contractor's ability and capacity for providing a one hundred (100%) percent Performance and Payment Bond for the project. The statement shall be made on the official letterhead of the bonding company and signed by an authorized agent of the bonding company.

BONDING & INSURANCE FOR CONTRACT AWARD:

The contract award will be contingent on full performance bonding, or equivalent and contractor's ability to meet KCHA insurance requirements as outlined in the bid documents.

HUD NON-ROUTINE MAINTENANCE WAGE RATES:

Bidders should note that the current HUD Non-Routine Maintenance wage rates and weekly payroll reporting requirements apply to this project.

WASHINGTON STATE REQUIREMENT:

All contractors and subcontractors working on this project are required to file a "Statement of Intent to Pay Prevailing Wages", "Affidavit of Wages Paid" and certified payroll with L&I. (See Form A.12 for additional information.)

EEOE:

The King County Housing Authority is an Equal Employment Opportunity Employer and strongly encourages minority-owned and women-owned businesses, socially and economically disadvantaged businesses, and small businesses to submit bids or to participate as subcontractors and suppliers on KCHA Contracts.

KCHA RESERVED RIGHTS:

The King County Housing Authority reserves the right to reject any or all bids or to waive any informality in the bidding. No bid shall be withdrawn for a period of thirty (30) calendar days subsequent to the opening of the bids without the written consent of KCHA.

The King County Housing Authority also reserves the right to reject all bids, for any reason, prior to Contract Execution.



PUBLIC RECORDS:

All information submitted to KCHA will become public records, as per RCW 42.56. If you are submitting information, which you think is confidential and/or proprietary to your business, KCHA recommends that you do not submit that information, as KCHA cannot guarantee that type of information will be withheld from a public disclosure request.

PLAN CENTERS:

Bid documents, including drawings, specifications and conditions of the agreements may be examined at the following offices:

BUILDERS EXCHANGE OF WA	CONTRACTOR PLAN CENTER	
2607 Wetmore Ave.	5468 SE International Way	
Everett, WA 98201	Milwaukie, OR 97222	
www.bxwa.com	www.contractorplancenter.com	
425-258-1303	503-650-0148	
DAILY JOURNAL OF COMMERCE	DODGE CONSTRUCTION	ISQFT
	NETWORK	2
www.djc.com	www.construction.com	<u>www.isqft.com</u>
206-622-8272	877-784-9556	800-364-2059 x7051

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PUBLICATION:	Daily Journal of Commerce	Daily
	The Seattle Medium	Wednesday
	Northwest Asian Weekly	Thursday
	KCHA Web Site	www.kcha.org/business/construction/open
		· · · · · ·

CONTACT PERSON:

Amy Kurtz 206-574-1283 Amyk@kcha.org Project Manager Phone Number Email Address



EXAMPLE OF <u>SEALED</u> ENVELOPE PROCEDURE / PREPARATION:

FROM:	
ENTER YOUR COMI Street Address City, State, Zip Code	PANY NAME
	TO:
	KING COUNTY HOUSING AUTHORITY CAPITAL CONSTRUCTION DEPARTMENT 700 Andover Park West, Suite C Tukwila, WA 98188
BID DUE:	
Date: April 5 2023	

Date: April 5, 2023 Time: 1:00 PM

PROJECT NAME: NORTHWOOD SQUARE SITE AND STORAGE

Upon Receipt, the Envelope will be Time and Date Stamped by King County Housing Authority



NOTICE TO ALL BIDDERS

In order to be considered as **RESPONSIVE BIDS**, all bidders <u>MUST</u> submit Signed Section B forms no later than the **Bid Due Date and Time**:

- B.1 Bid Form
- **B.2** Bidder's Experience Record
- **B.3** Contractor Certification
- **B.4** Non-Collusive Affidavit
- **B.5** Equal Opportunity
- **B.6** Bid Security (Submit only for bids greater than \$150,000)
- **B.7** Debarment / Suspension Compliance Certification
- **B.8** Proposed Subcontractor List
- B.9 Section 3
 - a. Business Certification
 - b. Subcontractor Work Plan
- **B.10** Harassment and Discrimination Policies
- **B.11** WMBE Survey (Form is not required to be responsive, but requested)
- B.12 Preliminary Project Schedule Provided by Contractor

From HUD Website 2021

U.S. Department of Housing and Urban Development

Office of Public and Indian Housing

Instructions to Bidders for Contracts Public and Indian Housing Programs

Previous edition is obsolete

FORM 5369

Instructions to Bidders for Contracts

Public and Indian Housing Programs

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1. Bid Preparation and Submission

(a) Bidders are expected to examine the specifications, drawings, all instructions, and, if applicable, the construction site (see also the contract clause entitled **Site Investigation and Conditions Affect-***ing the Work* of the *General Conditions of the Contract for Construc-tion*). Failure to do so will be at the bidders' risk.

(b) All bids must be submitted on the forms provided by the Public Housing Agency/Indian Housing Authority (PHA/IHA). Bidders shall furnish all the information required by the solicitation. Bids must be signed and the bidder's name typed or printed on the bid sheet and each continuation sheet which requires the entry of information by the bidder. Erasures or other changes must be initialed by the person signing the bid. Bids signed by an agent shall be accompanied by evidence of that agent's authority. (Bidders should retain a copy of their bid for their records.)

(c) Bidders must submit as part of their bid a completed form HUD-5369-A, "Representations, Certifications, and Other Statements of Bidders." NO LONGER REQUIRED BY HUD

(d) All bid documents shall be sealed in an envelope which shall be clearly marked with the words "Bid Documents," the Invitation for Bids (IFB) number, any project or other identifying number, the bidder's name, and the date and time for receipt of bids.

(e) If this solicitation requires bidding on all items, failure to do so will disqualify the bid. If bidding on all items is not required, bidders should insert the words "No Bid" in the space provided for any item on which no price is submitted.

(f) Unless expressly authorized elsewhere in this solicitation, alternate bids will not be considered.

(g) Unless expressly authorized elsewhere in this solicitation, bids submitted by telegraph or facsimile (fax) machines will not be considered.

(h) If the proposed contract is for a Mutual Help project (as described in 24 CFR Part 905, Subpart E) that involves Mutual Help contributions of work, material, or equipment, supplemental information regarding the bid advertisement is provided as an attachment to this solicitation.

2. Explanations and Interpretations to Prospective Bidders

(a) Any prospective bidder desiring an explanation or interpretation of the solicitation, specifications, drawings, etc., must request it at least 7 days before the scheduled time for bid opening. Requests may be oral or written. Oral requests must be confirmed in writing. The only oral clarifications that will be provided will be those clearly related to solicitation procedures, i.e., not substantive technical information. No other oral explanation or interpretation will be provided. Any information given a prospective bidder concerning this solicitation will be furnished promptly to all other prospective bidders as a written amendment to the solicitation, if that information is necessary in submitting bids, or if the lack of it would be prejudicial to other prospective bidders.

(b) Any information obtained by, or provided to, a bidder other than by formal amendment to the solicitation shall not constitute a change to the solicitation.

3. Amendments to Invitations for Bids

(a) If this solicitation is amended, then all terms and conditions which are not modified remain unchanged.

(b) Bidders shall acknowledge receipt of any amendment to this solicitation (1) by signing and returning the amendment, (2) by identifying the amendment number and date on the bid form, or (3) by letter, telegram, or facsimile, if those methods are authorized in the solicitation. The PHA/IHA must receive acknowledgement by the time and at the place specified for receipt of bids. Bids which fail to acknowledge the bidder's receipt of any amendment will result in the rejection of the bid if the amendment(s) contained information which substantively changed the PHA's/IHA's requirements.

(c) Amendments will be on file in the offices of the PHA/IHA and the Architect at least 7 days before bid opening.

4. Responsibility of Prospective Contractor

(a) The PHA/IHA will award contracts only to responsible prospective contractors who have the ability to perform successfully under the terms and conditions of the proposed contract. In determining the responsibility of a bidder, the PHA/IHA will consider such matters as the bidder's:

- (1) Integrity;
- (2) Compliance with public policy;
- (3) Record of past performance; and
- (4) Financial and technical resources (including construction and technical equipment).

(b) Before a bid is considered for award, the bidder may be requested by the PHA/IHA to submit a statement or other documentation regarding any of the items in paragraph (a) above. Failure by the bidder to provide such additional information shall render the bidder nonresponsible and ineligible for award.

5. Late Submissions, Modifications, and Withdrawal of Bids

(a) Any bid received at the place designated in the solicitation after the exact time specified for receipt will not be considered unless it is received before award is made and it:

(1) Was sent by registered or certified mail not later than the fifth calendar day before the date specified for receipt of offers (e.g., an offer submitted in response to a solicitation requiring receipt of offers by the 20th of the month must have been mailed by the 15th);

(2) Was sent by mail, or if authorized by the solicitation, was sent by telegram or via facsimile, and it is determined by the PHA/IHA that the late receipt was due solely to mishandling by the PHA/IHA after receipt at the PHA/IHA; or

(3) Was sent by U.S. Postal Service Express Mail Next Day Service - Post Office to Addressee, not later than 5:00 p.m. at the place of mailing two working days prior to the date specified for receipt of proposals. The term "working days" excludes weekends and observed holidays.

(b) Any modification or withdrawal of a bid is subject to the same conditions as in paragraph (a) of this provision.

(c) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent either by registered or certified mail is the U.S. or Canadian Postal Service postmark both on the envelope or wrapper and on the original receipt from the U.S. or Canadian Postal Service. Both postmarks must show a legible date or the bid, modification, or withdrawal shall be processed as if mailed late. "Postmark" means a printed, stamped, or otherwise placed impression (exclusive of a postage meter machine impression) that is readily identifiable without further action as having been supplied and affixed by employees of the U.S. or Canadian Postal Service on the date of mailing. Therefore, bidders should request the postal clerk to place a hand cancellation bull's-eye postmark on both the receipt and the envelope or wrapper.

(d) The only acceptable evidence to establish the time of receipt at the PHA/IHA is the time/date stamp of PHA/IHA on the proposal wrapper or other documentary evidence of receipt maintained by the PHA/IHA.

(e) The only acceptable evidence to establish the date of mailing of a late bid, modification, or withdrawal sent by Express Mail Next Day Service-Post Office to Addressee is the date entered by the post office receiving clerk on the "Express Mail Next Day Service-Post Office to Addressee" label and the postmark on both the envelope or wrapper and on the original receipt from the U.S. Postal Service. "Postmark" has the same meaning as defined in paragraph (c) of this provision, excluding postmarks of the Canadian Postal Service. Therefore, bidders should request the postal clerk to place a legible hand cancellation bull's eye postmark on both the receipt and Failure by a bidder to acknowledge receipt of the envelope or wrapper.

(f) Notwithstanding paragraph (a) of this provision, a late modification of an otherwise successful bid that makes its terms more favorable to the PHA/IHA will be considered at any time it is received and may be accepted.

(g) Bids may be withdrawn by written notice, or if authorized by this solicitation, by telegram (including mailgram) or facsimile machine transmission received at any time before the exact time set for opening of bids; provided that written confirmation of telegraphic or facsimile withdrawals over the signature of the bidder is mailed and postmarked prior to the specified bid opening time. A bid may be withdrawn in person by a bidder or its authorized representative if, before the exact time set for opening of bids, the identity of the person requesting withdrawal is established and the person signs a receipt for the bid.

6. Bid Opening

All bids received by the date and time of receipt specified in the solicitation will be publicly opened and read. The time and place of opening will be as specified in the solicitation. Bidders and other interested persons may be present.

7. Service of Protest

(a) Definitions. As used in this provision:

"Interested party" means an actual or prospective bidder whose direct economic interest would be affected by the award of the contract.

"Protest" means a written objection by an interested party to this solicitation or to a proposed or actual award of a contract pursuant to this solicitation.

(b) Protests shall be served on the Contracting Officer by obtaining written and dated acknowledgement from —

Contracting Officer Capital Construction Department King County Housing Authority 600 Andover Park West Tukwila, WA 98188

[Contracting Officer designate the official or location where a protest may be served on the Contracting Officer]

(c) All protests shall be resolved in accordance with the PHA's/ IHA's protest policy and procedures, copies of which are maintained at the PHA/IHA.

8. Contract Award

(a) The PHA/IHA will evaluate bids in response to this solicitation without discussions and will award a contract to the responsible bidder whose bid, conforming to the solicitation, will be most advantageous to the PHA/IHA considering only price and any price-related factors specified in the solicitation.

(b) If the apparent low bid received in response to this solicitation exceeds the PHA's/IHA's available funding for the proposed contract work, the PHA/IHA may either accept separately priced items (see 8(e) below) or use the following procedure to determine contract award. The PHA/IHA shall apply in turn to each bid (proceeding in order from the apparent low bid to the high bid) each of the separately priced bid deductible items, if any, in their priority order set forth in this solicitation. If upon the application of the first deductible item to all initial bids, a new low bid is within the PHA's/IHA's available funding, then award shall be made to that bidder. If no bid is within the available funding amount, then the PHA/IHA shall apply the second deductible item. The PHA/IHA shall continue this process until an evaluated low bid, if any, is within the PHA's/IHA's available funding. If upon the application of all deductibles, no bid is within the PHA's/IHA's available funding, or if the solicitation does not request separately priced deductibles, the PHA/IHA shall follow its written policy and procedures in making any award under this solicitation.

(c) In the case of tie low bids, award shall be made in accordance with the PHA's/IHA's written policy and procedures.

(d) The PHA/IHA may reject any and all bids, accept other than the lowest bid (e.g., the apparent low bid is unreasonably low), and waive informalities or minor irregularities in bids received, in accordance with the PHA's/IHA's written policy and procedures.

(e) Unless precluded elsewhere in the solicitation, the PHA/IHA may accept any item or combination of items bid.

(f) The PHA/IHA may reject any bid as nonresponsive if it is materially unbalanced as to the prices for the various items of work to be performed. A bid is materially unbalanced when it is based on prices significantly less than cost for some work and prices which are significantly overstated for other work.

(g) A written award shall be furnished to the successful bidder within the period for acceptance specified in the bid and shall result in a binding contract without further action by either party.

9. Bid Guarantee (applicable to construction and equipment contracts exceeding \$25,000)

KCHA Procurement Policy requires Bid Guarantees for Projects valued at \$150,000 or more.

All bids must be accompanied by a negotiable bid guarantee which shall not be less than five percent (5%) of the amount of the bid. The bid guarantee may be a certified check, bank draft, U.S. Government Bonds at par value, or a bid bond secured by a surety company acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. In the case where the work under the contract will be performed on an Indian reservation area, the bid guarantee may also be an irrevocable Letter of Credit (see provision 10, Assurance of Completion, below). Certified checks and bank drafts must be made payable to the order of the PHA/IHA. The bid guarantee shall insure the execution of the contract and the furnishing of a method of assurance of completion by the successful bidder as required by the solicitation. Failure to submit a bid guarantee with the bid shall result in the rejection of the bid. Bid guarantees submitted by unsuccessful bidders will be returned as soon as practicable after bid opening.

10. Assurance of Completion

(a) Unless otherwise provided in State law, the successful bidder shall furnish an assurance of completion prior to the execution of any contract under this solicitation. This assurance may be [Contracting Officer check applicable items] —

[X] (1) a performance and payment bond in a penal sum of 100 percent of the contract price; or, as may be required or permitted by State law;

[] (2) separate performance and payment bonds, each for 50 percent or more of the contract price;

[] (3) a 20 percent cash escrow;

[] (4) a 25 percent irrevocable letter of credit; or,

[] (5) an irrevocable letter of credit for 10 percent of the total contract price with a monitoring and disbursements agreement with the IHA (applicable only to contracts awarded by an IHA under the Indian Housing Program).

(b) Bonds must be obtained from guarantee or surety companies acceptable to the U.S. Government and authorized to do business in the state where the work is to be performed. Individual sureties will not be considered. U.S. Treasury Circular Number 570, published annually in the Federal Register, lists companies approved to act as sureties on bonds securing Government contracts, the maximum underwriting limits on each contract bonded, and the States in which the company is licensed to do business. Use of companies listed in this circular is mandatory. Copies of the circular may be downloaded on the U.S. Department of Treasury website http://www.fms.treas.gov/c570/index.html, or ordered for a minimum fee by contacting the Government Printing Office at (202) 512-2168.

(c) Each bond shall clearly state the rate of premium and the total amount of premium charged. The current power of attorney for the person who signs for the surety company must be attached to the bond. The effective date of the power of attorney shall not precede the date of the bond. The effective date of the bond shall be on or after the execution date of the contract.

(d) Failure by the successful bidder to obtain the required assurance of completion within the time specified, or within such extended period as the PHA/IHA may grant based upon reasons determined adequate by the PHA/IHA, shall render the bidder ineligible for award. The PHA/IHA may then either award the contract to the next lowest responsible bidder or solicit new bids. The PHA/IHA may retain the ineligible bidder's bid guarantee.

11. Preconstruction Conference (applicable to construction contracts)

After award of a contract under this solicitation and prior to the start of work, the successful bidder will be required to attend a preconstruction conference with representatives of the PHA/IHA and its architect/engineer, and other interested parties convened by the PHA/IHA. The conference will serve to acquaint the participants with the general plan of the construction operation and all other requirements of the contract (e.g., Equal Employment Opportunity, Labor Standards). The PHA/IHA will provide the successful bidder with the date, time, and place of the conference.

12. Indian Preference Requirements (applicable only if this solicitation is for a contract to be performed on a project for an Indian Housing Authority)

(a) HUD has determined that the contract awarded under this solicitation is subject to the requirements of section 7(b) of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450e(b)). Section 7(b) requires that any contract or subcontract entered into for the benefit of Indians shall require that, to the greatest extent feasible

(1) Preferences and opportunities for training and employment (other than core crew positions; see paragraph (h) below) in connection with the administration of such contracts or subcontracts be given to qualified "Indians." The Act defines "Indians" to mean persons who are members of an Indian tribe and defines "Indian tribe" to mean any Indian tribe, band, nation, or other organized group or community, including any Alaska Native village or regional or village corporation as defined in or established pursuant to the Alaska Native Claims Settlement Act, which is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians; and,

(2) Preference in the award of contracts or subcontracts in connection with the administration of contracts be given to Indian organizations and to Indian-owned economic enterprises, as defined in section 3 of the Indian Financing Act of 1974 (25 U.S.C. 1452). That Act defines "economic enterprise" to mean any Indianowned commercial, industrial, or business activity established or organized for the purpose of profit, except that the Indian ownership must constitute not less than 51 percent of the enterprise; "Indian organization" to mean the governing body of any Indian tribe or entity established or recognized by such governing body; "Indian" to mean any person who is a member of any tribe, band, group, pueblo, or community which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs and any "Native" as defined in the Alaska Native Claims Settlement Act; and Indian "tribe" to mean any Indian tribe, band, group, pueblo, or community including Native villages and Native groups (including

Treasury website: https://www.fiscal.treasury.gov/surety-bonds/

eorporations organized by Kenai, Juneau, Sitka, and Kodiak) as defined in the Alaska Native Claims Settlement Act, which is recognized by the Federal Government as eligible for services from the Bureau of Indian Affairs.

(b) (1) The successful Contractor under this solicitation shall comply with the requirements of this provision in awarding all subcontracts under the contract and in providing training and employment opportunities.

(2) A finding by the IHA that the contractor, either (i) awarded a subcontract without using the procedure required by the IHA, (ii) falsely represented that subcontracts would be awarded to Indian enterprises or organizations; or, (iii) failed to comply with the contractor's employment and training preference bid statement shall be grounds for termination of the contract or for the assessment of penalties or other remedies.

(c) If specified elsewhere in this solicitation, the IHA may restrict the solicitation to qualified Indian-owned enterprises and Indian organizations. If two or more (or a greater number as specified elsewhere in the solicitation) qualified Indian-owned enterprises or organizations submit responsive bids, award shall be made to the qualified enterprise or organization with the lowest responsive bid. If fewer than the minimum required number of qualified Indian-owned enterprises or organizations submit responsive bids, the IHA shall reject all bids and readvertise the solicitation in accordance with paragraph (d) below.

(d) If the IHA prefers not to restrict the solicitation as described in paragraph (c) above, or if after having restricted a solicitation an insufficient number of qualified Indian enterprises or organizations submit bids, the IHA may advertise for bids from non-Indian as well as Indian-owned enterprises and Indian organizations. Award shall be made to the qualified Indian enterprise or organization with the lowest responsive bid if that bid is –

(1) Within the maximum HUD-approved budget amount established for the specific project or activity for which bids are being solicited; and

(2) No more than the percentage specified in 24 CFR 905.175(c) higher than the total bid price of the lowest responsive bid from any qualified bidder. If no responsive bid by a qualified Indian-owned economic enterprise or organization is within the stated range of the total bid price of the lowest responsive bid from any qualified enterprise, award shall be made to the bidder with the lowest bid.

(e) Bidders seeking to qualify for preference in contracting or subcontracting shall submit proof of Indian ownership with their bids. Proof of Indian ownership shall include but not be limited to:

(1) Certification by a tribe or other evidence that the bidder is an Indian. The IHA shall accept the certification of a tribe that an individual is a member.

(2) Evidence such as stock ownership, structure, management, control, financing and salary or profit sharing arrangements of the enterprise. (f) (1) All bidders must submit with their bids a statement describing how they will provide Indian preference in the award of subcontracts. The specific requirements of that statement and the factors to used by the IHA in determining the statement's adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement shall be rejected as nonresponsive. The IHA may require that comparable statements be provided by subcontractors to the successful Contractor, and may require the Contractor to reject any bid or proposal by a subcontractor that fails to include the statement.

(2) Bidders and prospective subcontractors shall submit a certification (supported by credible evidence) to the IHA in any instance where the bidder or subcontractor believes it is infeasible to provide Indian preference in subcontracting. The acceptance or rejection by the IHA of the certification shall be final. Rejection shall disqualify the bid from further consideration.

(g) All bidders must submit with their bids a statement detailing their employment and training opportunities and their plans to provide preference to Indians in implementing the contract; and the number or percentage of Indians anticipated to be employed and trained. Comparable statements from all proposed subcontractors must be submitted. The criteria to be used by the IHA in determining the statement(s)'s adequacy are included as an attachment to this solicitation. Any bid that fails to include the required statement(s), or that includes a statement that does not meet minimum standards required by the IHA shall be rejected as nonresponsive.

(h) Core crew employees. A core crew employee is an individual who is a bona fide employee of the contractor at the time the bid is submitted; or an individual who was not employed by the bidder at the time the bid was submitted, but who is regularly employed by the bidder in a supervisory or other key skilled position when work is available. Bidders shall submit with their bids a list of all core crew employees.

(i) Preference in contracting, subcontracting, employment, and training shall apply not only on-site, on the reservation, or within the IHA's jurisdiction, but also to contracts with firms that operate outside these areas (e.g., employment in modular or manufactured housing construction facilities).

(j) Bidders should contact the IHA to determine if any additional local preference requirements are applicable to this solicitation.

(k) The IHA [] does [] does not [Contracting Officer check applicable box] maintain lists of Indian-owned economic enterprises and Indian organizations by specialty (e.g., plumbing, electrical, foundations), which are available to bidders to assist them in meeting their responsibility to provide preference in connection with the administration of contracts and subcontracts.



FAIR HOUSING/ACCESSIBILITY NOTICE

A. <u>SUBJECT:</u>

Accessibility Notice: Section 504 of the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Architectural Barriers Act of 1968 and the Fair Housing Act of 1988.

B. <u>PURPOSE:</u>

The purpose of this Notice is to remind recipients of Federal funds (in this instance, the Public Housing Authority) of their obligation to comply with pertinent laws and implementing regulations which provide for non-discrimination and accessibility in Federally funded housing and non-housing programs for people with disabilities.

C. <u>NOTIFICATIONS:</u>

Public housing agencies (PHAs) and other recipients of Federal PIH funds are responsible for providing this Notice to all current and future contractors participating in covered programs / activities or performing work covered under the above subject legislation and implementing regulations.

D. <u>TO READ THE FULL TEXT OF THE NOTICE:</u>

Go to <u>www.kcha.org/business/requirements</u> Scroll down to Fair Housing Laws and Read: <u>Fair Housing / Accessibility Notice</u>



PRE-BID CONFERENCE

There will be a Pre-Bid Conference prior to the date of the bid opening for the purpose of providing a general discussion and review of any questions that might pertain to the bidding documents and procedures. All interested contractors are required to attend this meeting after reading the Project Manual. Please bring Project Manual and drawings, if any, to this conference. Project Manuals will be available for purchase at the Pre-Bid Conference. ATTENDANCE OF THE PRE-BID CONFERENCE IS REQUIRED FOR ACCEPTANCE OF BID FROM THE CONTRACTOR.

PROJECT SITE ADDRESS:	Northwood Square 529 8 th Street NE Auburn, WA 98002
CONFERENCE DATE:	March 22, 2023
TIME:	11:00 AM
CONTACT NAME:	Amy Kurtz
EMAIL:	Amyk@kcha.org



PROJECT WAGE RATES

A. DAVIS BACON WAGE RATES (NA)

B. HUD NON-ROUTINE MAINTENANCE WAGES (NA)

TYPE OF WAGE RATES:HUD NON-ROUTINE MAINTENANCE

WAGE DATE:

<u>02/01/23</u>

For contracts entered into pursuant to competitive bidding procedures, the bid opening date "locks-in" the Non-Routine Maintenance Wage Rates that will be used during the course of the project.

NOTE: The awarded bidder will be required to submit, along with other contractual documentation, Form C.9 Certification of Compliance with Washington State Wage Payment Statutes.

Maintenance Wage Rate Determination	U.S. Department of Housing and Urban Development Office of Labor Relations			
Agency Name:	LR 2000 Agency ID No:	Wage Decision Type:		
King County Housing Authority 600 Andover Park W.	WA23-ALL	Routine Maintenance		
Tukwila, WA 98188		☑ Nonroutine Maintenance		
(Sedro Woolley, King County HA)	Effective Date:	Expiration Date:		
	February 1, 2023	December 31, 2025		
The following wage rate determination is made pursuant to Section 12(a) of the U.S. Housing Act of 1937, as amended, (public housing agencies), or pursuant to Section 104(b) of the Native American Housing Assistance and Self-determination Act of 1996, as amended, (Indian housing agencies). The agency and its contractors may pay to maintenance laborers and mechanics no less than the wage rate(s) indicated for the type of work they actually perform.				

Melanie Hertel HUD Labor Relations (Name, Title, Signature)	revised 1.23.2023 Date	_			
	HOURLY WAGE RATES				
WORK CLASSIFICATION(S)	BASIC WAGE	FRINGE BENEFIT(S) (if any)			
Asphalt Painter	\$23.57	\$6.30			
Asphalt Raker	\$23.57	\$6.30			
Asphalt Roller/Cement Mixer over 16yds.	\$32.24	\$10.49			
Backhoe Operator	\$30.52	\$8.85			
Carpenter	\$32.24	\$10.49			
Cement Mason - Finisher	\$32.24	\$10.49			
Concrete Saw Operator	\$30.52	\$8.85			
Drywaller	\$30.52	\$8.85			
Electrician	\$32.24	\$10.49			
Elevator Mechanic	\$56.22	\$39.76			
Fence Erector	\$23.57	\$6.30			
Glazier	\$30.52	\$8.85			
HVAC/Furnace Mechanic	\$32.24	\$10.49			
Ironworker	\$46.76	\$31.00			
Laborer	\$30.10	\$8.27			
Landscape/Cleaner	\$23.57	\$6.30			
Low Voltage Technician	\$32.24	\$10.49			
Motor Grader	\$30.52	\$8.85			
Nozzleman for Cement Mixer	\$30.52	\$8.85			
		The agency employee benefit program has been determined b HUD to be acceptable for meetin the prevailing fringe benefit requirements. (HUD Labor Relations: If applicable, check box and initial below.)			
		LR Staff Initial FOR HUD USE ONLY LR2000:			
		Log in:			
		Log Out:			

Maintenance Wage Rate Determination	U.S. Department of Housing and Urban Development Office of Labor Relations	
Agency Name:	LR 2000 Agency ID No:	Wage Decision Type:
King County Housing Authority 600 Andover Park W.	WA23-ALL	Routine Maintenance
Tukwila, WA 98188		Nonroutine Maintenance
(Sedro Woolley, King County HA)	Effective Date:	Expiration Date:
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/s/ Melanie Hertel HUD Labor Relations (Name, Title, Signature)	Revised 1.23.2023 Date					
	HOURLY WAGE RATES					
WORK CLASSIFICATION(S)	BASIC WAGE	FRINGE BENEFIT(S) (if any)				
Painter	\$30.52	\$8.85				
Paver/Roller/(Sakai Roller)	\$32.24	\$10.49				
Paving Machine Operator – Self Propelled	\$30.52	\$8.85				
Pipefitter	\$23.57	\$6.30				
Pipe Reliner	\$32.24	\$10.49				
Plumber	\$32.24	\$10.49				
Pressure Washer	\$23.57	\$6.30				
Refrigeration Mechanic	\$32.24	\$10.49				
Roofer	\$30.52	\$8.85				
Roto-mill/Roto-grinder Operator	\$30.52	\$8.85				
Screedman	\$30.52	\$8.85				
Sheet Metal Worker	\$32.24	\$10.49				
Soft Floor Layer	\$30.52	\$8.85				
Tree Trimmer/Tree Climber	\$23.57	\$6.30				
Truck Driver – All Yardage	\$30.52	\$8.85				
Welder	\$56.68	\$28.02				
		The agency employee benefit program has been determined by HUD to be acceptable for meeting the prevailing fringe benefit requirements. (HUD Labor Relations: If applicable, check box and initial below.)				
		LR Staff Initial				
		FOR HUD USE ONLY LR2000:				
		Log in:				
		Log Out:				



TAX APPLICATIONS

TAX APPLICATIONS

If you have questions regarding the application of the retail sales tax exemption to the King County Housing Authority, please call your personal tax advisor or the Washington State Department of Revenue Office toll-free for one-on-one help: Telephone Information Center 1-800-647-7706.

WAC 458-20-17001

Government contracting -- Construction, installations, or improvements to government real property.

(1) Special business and occupation tax applications and special sales/use tax applications pertain for prime and subcontractors who perform certain construction, installation, and improvements to real property of or for the United States, its instrumentalities, or a county or city housing authority created pursuant to chapter 35.82 RCW. These specific construction activities are excluded from the definition of "sale at retail" under RCW 82.04.050. All other sales to the United States, its agencies or instrumentalities are taxable as retail sales or wholesale sales, as appropriate. See WAC 458-20-190.

(2) The definitions of terms and general provisions contained in WAC 458-20-170 apply equally for this rule, as appropriate. In addition, the terms, "clearing land" and "moving earth" include well drilling, core drilling, and hole digging, whether or not casing materials are installed and any grading or clearing of land, including the razing of buildings or other structures.

Business and Occupation Tax

(3) Amounts derived from constructing, repairing, decorating, or improving new or existing buildings or other structures, including installing or attaching tangible personal property therein or thereto, and clearing land or moving earth, of or for the United States, its instrumentalities, or county or city housing authorities of chapter 35.82 RCW are taxable under the government contracting classification of business and occupation tax. The measure of the tax is the gross contract price.

(4) Government contractors who manufacture or produce any tangible personal property for their own commercial or industrial use as consumers in performing government contracting activities are subject to the manufacturing classification of business and occupation tax measured by the value of the property manufactured or produced. See also, WAC 458-20-134. The manufacturing tax applies even though the property manufactured or produced for commercial use may be subsequently incorporated into buildings or other structures under the government contract and may thereby enhance the gross contract price.

Retail Sales Tax

(5) The retail sales tax does not apply to the gross contract price, or any part thereof, for any business activities taxable under the government contracting classification. Prime and subcontractors who perform such activities are themselves included within the statutory definition of "consumer" under RCW 82.04.190 and are required to pay retail sales tax upon all purchases of materials, including prefabricated and precast items, equipment, and other tangible personal property which is installed, applied, attached, or otherwise incorporated in their government contracting work. This applies for all such purchases of tangible personal property for installation, etc., even though the full purchase price of such property will be reimbursed by the government or housing authority in the gross contract price. It also applies notwithstanding that the contract may contain an immediate title vesting clause which provides that the title to the property vests in the government or housing authority immediately upon its acquisition by the contractor.



(6) Also, the retail sales tax must be paid by government contractors upon their purchases and leases or rentals of tools, consumables, and other tangible personal property used by them as consumers in performing government contracting.

Use Tax

(7) The use tax applies upon the value of all materials, equipment, and other tangible personal property purchased at retail, acquired as a bailee or donee, or manufactured or produced by the contractor for commercial or industrial use in performing government contracting and upon which no retail sales tax has been paid by the contractor, its bailor or donor.

(8) Thus the use tax applies to all property provided by the federal government to the contractor for installation or inclusion in the contract work as well as to all government provided tooling.

(9) The use tax is to be reported and paid by the government contractor who actually installs or applies the property to the contract. Where the actual installing contractor pays the tax, no further use tax is due upon such property by any other contractor.

(10) Note to contractors: The United States Supreme Court has sustained the government contracting tax applications for this state, even though the ultimate economic burden of the tax is borne by the United States Government (Washington v. US, 75 L.Ed 2d 264, 1983).

(11) This rule does not apply to public road construction. See WAC 458-20-171. [Statutory Authority: RCW 82.32.300. 86-10-016 (Order ET 86-9), § 458-20-17001, filed 5/1/86.]

SECTION 3 - CLAUSE

- A. The work to be performed under this contract is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u (Section 3) as implemented by HUD under 24 CFR Part 75 (collectively, the "Section 3 Regulations"). The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD- assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and YouthBuild participants.
- B. The parties to this contract agree to comply with Section 3 Regulations. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual obligation or other impediment that would prevent them from complying with Section 3 Regulations.
- C. The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.
- D. The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with Section 3 Regulations, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of Section 3 Regulations. The Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of Section 3 Regulations.
- E. The Contractor will certify that any vacant employment positions, including training positions, that are filled; (1) after the Contractor is selected but before the contract is executed, and (2) with persons other than those to whom Section 3 Regulations require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under Section 3 Regulations.
- F. Noncompliance with HUD's Section 3 Regulations may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.
- G. Section 3 Employment and Training. Without limiting Contractor's obligation to comply with Section 3 Regulations, the Contractor specifically agrees to use best efforts to provide employment and training opportunities to Section 3 workers in the following order of priority:
 - 1. To residents of the KCHA development where the work is being performed;
 - 2. To residents of other KCHA developments or for residents of Section 8-assisted housing managed by KCHA;
 - 3. To participants in YouthBuild programs; and



- 4. To low- and very low-income persons residing within the Puget Sound Region.
- H. Section 3 Contracting. Without limiting Contractor's obligation to comply with Section 3 Regulations, Contractor specifically agrees to use best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers in the following order of priority:
 - 1. To Section 3 business concerns that provide economic opportunities for KCHA residents of the development where the work is being performed;
 - 2. To Section 3 business concerns that provide economic opportunities for KCHA residents of other KCHA developments or Section–8 assisted housing managed by KCHA;
 - 3. To YouthBuild programs; and
 - 4. To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the Puget Sound Region.



SECTION 3 – SUPPLEMENTAL INSTRUCTIONS TO BIDDERS

LOCAL RESIDENT HIRING AND CONTRACTING (SECTION 3) REQUIREMENTS:

The Owner's or King County Housing Authority's (KCHA) goal for this project is to participate in Section 3 activities by including efforts that will provide employment opportunities to Section 3 workers and contracting opportunities to Section 3 businesses. (Section 3 workers and Section 3 Businesses are defined below and in 24 CFR 75.)

The Contractor and its Subcontractors at all tiers for this specific contract will partner with the Owner to contribute to the Owner's overall "Section 3" goals, as described below.

Because local hiring and contracting requirements are defined under Section 3 of the Housing and Community Development Act of 1968, these requirements are commonly referred to as Section 3. The definitions and goals are defined in Sections A and B below. Section C describes the process. Section D discusses consequences of non-compliance with Section 3 goals and Section E describes some local hiring resources. For more information on the Owner's employment and training efforts, or compliance with Section 3, please contact KCHA by email at Section3@kcha.org.

A. Section 3 Definitions

For the purposes of this solicitation:

- 1. "Section 3 worker" means any worker who currently fits or when hired within the past five years fit at least one of the following categories, as documented:
 - a. The worker's income for the previous or annualized calendar year is below the income limit established by HUD. (See Pg. 4 of this section for HUD income limits)
 - b. The worker is employed by a Section 3 business concern.
 - c. The worker is a YouthBuild participant.
- 2. "Targeted Section 3 worker" means a Section 3 worker who is:
 - a. A worker employed by a Section 3 business concern; or
 - b. A worker who currently fits or when hired fit at least one of the following categories, as documented within the past five years:
 - i. A resident of public housing or Section 8-assisted housing;
 - ii. A resident of other public housing projects or Section 8–assisted housing managed by the PHA that is providing the assistance; or
 - iii. A YouthBuild participant.
- 3. "Business concern" means a business entity formed in accordance with State law, and which is licensed under State, county, or municipal law to engage in the type of business activity for which it was formed.
- 4. "Section 3 business concern" means a business concern meeting at least one of the following criteria, documented within the last six-month period:
 - a. It is at least 51 percent owned and controlled by low- or very low-income persons;
 - b. Over 75 percent of the labor hours performed for the business over the prior three-month period are performed by Section 3 workers; or
 - c. It is a business at least 51 percent owned and controlled by current public housing residents or residents who currently live in Section 8–assisted housing.
- 5. The greatest extent feasible means:
 - a. Completing and submitting a Section 3 Work Plan to designated Owner staff prior to contract signing (template to be provided by the Owner).
 - b. If contracting with Section 3 business concerns:
 - i. Placing qualified business enterprises on solicitation lists.



- ii. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation of qualified Section 3 businesses.
- iii. Using the services and assistance of the U.S. Small Business Administration, the Minority Business Development Agency of the U.S. Department of Commerce and State and local governmental small business agencies to identify potential Section 3 businesses.
- iv. Ensuring that small and minority businesses and women's business enterprises are solicited whenever they are potential sources.
- c. If hiring Section 3 workers:
 - i. Post job opportunities for a mutually agreed upon length of time through the Owner's employment agency service partners and at project site as appropriate.
 - ii. Conduct interviews with qualified Section 3 workers.
 - iii. Notify designated Owner (KCHA) staff of all new hires.
- d. For both: Complete Section 3 compliance and tracking paperwork as necessary.

B. Section 3 Goals

The Owner will require, to the greatest extent feasible, for the Contractor to demonstrate participation in the local hiring and contracting requirements as defined under Section 3 of the Housing and Community Development Act of 1968.

- 1. Bidders shall demonstrate compliance with the Section 3 goals by making a best faith effort to achieve the following benchmarks:
 - a. Twenty-five (25) percent or more of the total number of labor hours worked by all workers are Section 3 workers; and
 - b. Five (5) percent or more of the total number of labor hours worked by all workers are Targeted Section 3 workers.
- 2. The successful bidder and covered subcontractors shall direct their efforts to provide Section 3 employment opportunities to Section 3 workers in the following order of priority:
 - a. First Priority: Current residents of KCHA development(s) benefitting from project.
 - b. Second Priority: Other Owner public housing and Section 8 voucher- assisted residents.
 - c. Third Priority: Participants in HUD Youthbuild programs.
 - d. Fourth Priority: Other low or very low income individuals in the Housing Authorities metropolitan area (Puget Sound region) who are at or below the Area's Low Income calculation.
- 3. The Contractor and covered subcontractors shall direct their efforts to award contracts to Section 3 business concerns in the following order of priority:
 - a. First Priority: To Section 3 business concern that provides economic opportunities for KCHA residents at the site(s) where the work will take place.
 - b. Second Priority: To Section 3 business concerns that provide economic opportunities for residents of other KCHA developments or Section–8 assisted housing managed by KCHA.
 a. Third Priority: A subcontractor that is a UUD Youthbuild company.
 - c. Third Priority: A subcontractor that is a HUD Youthbuild company.
 - d. Fourth Priority: To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the metropolitan area (Puget Sound).
- 4. Sealed Bidding

In order for KCHA to meet or exceed its adopted goal that 3% of all non-construction contracts and 10% of construction contracts paid in whole or in part with HUD funds be awarded to Section 3 businesses, KCHA may elect, on a contract-by-contract basis, to award a competitively bid contract to a responsible bidder other than the lowest responsive bidder by using the following procedure:

Bids shall be solicited from both Section 3 and non-Section 3 business concerns. KCHA may award the contract to the qualified Section 3 business concern with the highest priority ranking



and with the lowest responsive bid if:

- a. the specific project or KCHA as an agency is otherwise not expected to meet Section 3 utilization goals; and,
- b. the bid is within the maximum total contract price established in KCHA's budget for the specific project for which bids are being taken; and,
- c. the sources of funds for the project are such that there are no conflicts between this procedure and applicable state law; and,
- d. the bid is not more than five percent (5%) higher than the total bid price for the lowest responsive bid from any responsible, bidder.

If no responsive bid by a Section 3 business concern meets the requirements above, the contract shall be awarded to a responsible bidder with the lowest responsive bid.

C. The Process

- 1. Contract is awarded to lowest responsible Bidder.
- 2. Section 3 orientation with Owner. Once the Notice of Intent to Award has been issued to the successful Bidder, Owner's staff will contact that Bidder and arrange for a meeting to discuss local hiring and contracting goals and strategies in greater detail. At this meeting, the Contractor will be provided a packet that will include a Section 3 overview, Section 3 certification form, and all Section 3 compliance and tracking forms that will be used throughout the contract.
- 3. Contractor reports on Section 3 activities monthly.

D. Penalties for Non-compliance

Owner's commitment to this program is reflected in part by the cost of administering the program. Failure to make a good faith effort to the greatest extent feasible negates such funding and impairs the Owner's efforts to promote workforce diversity and to provide fair and equal opportunities to the public as a whole as a result of the expenditure of public funds. Therefore, if awarded this contract, the parties will mutually agree that failure to meet the requirements, including but not limited to the submission of required documentation, constitutes a material breach of contract. In the event of such breach, Owner may take any or all of the actions as contained in the Contract Documents.

E. Local Hiring Resources

Contact KCHA by email at <u>Section3@kcha.org</u> to obtain a list of local hiring resources.

	Income Limit 1 person		on		
Location	Extremely Low Income		Very Low Income		Low Income
Kitsap County (Bremerton, Silverdale)	\$21,600		\$36,050		\$57,650
King/ Snohomish Counties (Seattle, Bellevue, Everett)	\$27,200		\$45,300		\$66,750
Pierce County (Tacoma)	\$21,350		\$35 <i>,</i> 550		\$56,850
Skagit County (Sedro-Woolley)	\$18,100		\$30,150		\$48,250
Thurston County (Olympia, Tumwater)	\$21,200		\$35,350		\$56,500

SECTION 3 – 2022 INCOME GUIDELINES



PROGRESS PAYMENT SUSPENSION CRITERIA

CRITERIA will include:

- 1. Non-submittal of Certified Payroll documents (see Informational Form A.12)
- 2. Non-submittal of Section 3 Labor Hours Benchmark Status Report (see Section C for sample)
- 3. No lien release with Application for Payment
- 4. Insurance expires
- 5. Federal and/or State liens on general contractor
- 6. Suspension/expiration of WA State contractor's license
- 7. Work not accomplished
- 8. Work not approved/ accepted
- 9. Repeated safety violations not resolved if warnings from KCHA are ignored
- 10. Incorrect Application for Payment or invoice (whichever is applicable)
- 11. Non-submittal of the GC Certification Upon Application for Payment (see Section E, Division 1 for sample of KCHA Pay Application which includes the continuation sheet, the payment application and the GC Certification)



EXECUTIVE ORDER 11246 (as AMENDED)

---DISCLAIMER--- http://www.dol.gov/general/disclaim#statutory

Executive Order 11246 - Equal Employment Opportunity

SOURCE: The provisions of Executive Order 11246 of Sept. 24, 1965, appear at 30 FR 12319, 12935, 3 CFR, 1964-1965 Comp., p.339, unless otherwise noted.

Under and by virtue of the authority vested in me as President of the United States by the Constitution and statutes of the United States, it is ordered as follows:

Part I - Nondiscrimination in Government Employment

[Part I superseded by EO 11478 of Aug. 8, 1969, 34 FR 12985, 3 CFR, 1966-1970 Comp., p. 803]

Part II - Nondiscrimination in Employment by Government Contractors and Subcontractors Subpart A - Duties of the Secretary of Labor

SEC. 201.The Secretary of Labor shall be responsible for the administration and enforcement of Parts II and III of this Order. The Secretary shall adopt such rules and regulations and issue such orders as are deemed necessary and appropriate to achieve the purposes of Parts II and III of this Order.

[Sec. 201 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart B - Contractors' Agreements

SEC. 202. Except in contracts exempted in accordance with Section 204 of this Order, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

During the performance of this contract, the contractor agrees as follows:

(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.

(2) The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States."

[Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 203. Each contractor having a contract containing the provisions prescribed in Section 202 shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.

(b) Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract.

(c) Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the Compliance Report shall include such information as to such labor union's or agency's practices and policies affecting compliance as the Secretary of Labor may prescribe: Provided, That to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify to the Secretary of Labor as part of its Compliance Report and shall set forth what efforts he has made to obtain such information.

(d) The Secretary of Labor may direct that any bidder or prospective contractor or subcontractor shall submit, as part of his Compliance Report, a statement in writing, signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with supporting information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this Order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and



provisions of the order. In the event that the union, or the agency shall refuse to execute such a statement, the Compliance Report shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the Secretary of Labor may require.

[Sec. 203 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684; EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 204 (a) The Secretary of Labor may, when the Secretary deems that special circumstances in the national interest so require, exempt a contracting agency from the requirement of including any or all of the provisions of Section 202 of this **Order** in any specific contract, subcontract, or purchase **order**.

(b) The Secretary of Labor may, by rule or regulation, exempt certain classes of contracts, subcontracts, or purchase orders (1) whenever work is to be or has been performed outside the United States and no recruitment of workers within the limits of the United States is involved; (2) for standard commercial supplies or raw materials; (3) involving less than specified amounts of money or specified numbers of workers; or (4) to the extent that they involve subcontracts below a specified tier.

(c) Section 202 of this **Order** shall not apply to a Government contractor or subcontractor that is a religious corporation, association, educational institution, or society, with respect to the employment of individuals of a particular religion to perform work connected with the carrying on by such corporation, association, educational institution, or society of its activities. Such contractors and subcontractors are not exempted or excused from complying with the other requirements contained in this **Order**.

(d) The Secretary of Labor may also provide, by rule, regulation, or **order**, for the exemption of facilities of a contractor that are in all respects separate and distinct from activities of the contractor related to the performance of the contract: provided, that such an exemption will not interfere with or impede the effectuation of the purposes of this **Order**: and provided further, that in the absence of such an exemption all facilities shall be covered by the provisions of this **Order**."

[Sec. 204 amended by EO 13279 of Dec. 16, 2002, 67 FR 77141, 3 CFR, 2002 Comp., p. 77141 - 77144]

Subpart C - Powers and Duties of the Secretary of Labor and the Contracting Agencies

SEC. 205. The Secretary of Labor shall be responsible for securing compliance by all Government contractors and subcontractors with this Order and any implementing rules or regulations. All contracting agencies shall comply with the terms of this Order and any implementing rules, regulations, or orders of the Secretary of Labor. Contracting agencies shall cooperate with the Secretary of Labor and shall furnish such information and assistance as the Secretary may require.

[Sec. 205 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 206. The Secretary of Labor may investigate the employment practices of any Government contractor or subcontractor to determine whether or not the contractual provisions specified in Section 202 of this Order have been violated. Such investigation shall be conducted in accordance with the procedures established by the Secretary of Labor.

(b) The Secretary of Labor may receive and investigate complaints by employees or prospective employees of a Government contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Section 202 of this Order.

[Sec. 206 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 207. The Secretary of Labor shall use his/her best efforts, directly and through interested Federal, State, and local agencies, contractors, and all other available instrumentalities to cause any labor union



engaged in work under Government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this Order. The Secretary of Labor shall, in appropriate cases, notify the Equal Employment Opportunity Commission, the Department of Justice, or other appropriate Federal agencies whenever it has reason to believe that the practices of any such labor organization or agency violate Title VI or Title VII of the Civil Rights Act of 1964 or other provision of Federal law.

[Sec. 207 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 208. The Secretary of Labor, or any agency, officer, or employee in the executive branch of the Government designated by rule, regulation, or order of the Secretary, may hold such hearings, public or private, as the Secretary may deem advisable for compliance, enforcement, or educational purposes.

(b) The Secretary of Labor may hold, or cause to be held, hearings in accordance with Subsection of this Section prior to imposing, ordering, or recommending the imposition of penalties and sanctions under this Order. No order for debarment of any contractor from further Government contracts under Section 209(6) shall be made without affording the contractor an opportunity for a hearing.

Subpart D - Sanctions and Penalties

SEC. 209. In accordance with such rules, regulations, or orders as the Secretary of Labor may issue or adopt, the Secretary may:

(1) Publish, or cause to be published, the names of contractors or unions which it has concluded have complied or have failed to comply with the provisions of this Order or of the rules, regulations, and orders of the Secretary of Labor.

(2) Recommend to the Department of Justice that, in cases in which there is substantial or material violation or the threat of substantial or material violation of the contractual provisions set forth in Section 202 of this Order, appropriate proceedings be brought to enforce those provisions, including the enjoining, within the limitations of applicable law, of organizations, individuals, or groups who prevent directly or indirectly, or seek to prevent directly or indirectly, compliance with the provisions of this Order.

(3) Recommend to the Equal Employment Opportunity Commission or the Department of Justice that appropriate proceedings be instituted under Title VII of the Civil Rights Act of 1964.

(4) Recommend to the Department of Justice that criminal proceedings be brought for the furnishing of false information to any contracting agency or to the Secretary of Labor as the case may be.

(5) After consulting with the contracting agency, direct the contracting agency to cancel, terminate, suspend, or cause to be cancelled, terminated, or suspended, any contract, or any portion or portions thereof, for failure of the contractor or subcontractor to comply with equal employment opportunity provisions of the contract. Contracts may be cancelled, terminated, or suspended absolutely or continuance of contracts may be conditioned upon a program for future compliance approved by the Secretary of Labor.

(6) Provide that any contracting agency shall refrain from entering into further contracts, or extensions or other modifications of existing contracts, with any noncomplying contractor, until such contractor has satisfied the Secretary of Labor that such contractor has established and will carry out personnel and employment policies in compliance with the provisions of this Order.

(b) Pursuant to rules and regulations prescribed by the Secretary of Labor, the Secretary shall make reasonable efforts, within a reasonable time limitation, to secure compliance with the contract provisions of this Order by methods of conference, conciliation, mediation, and persuasion before proceedings shall be instituted under subsection (a)(2) of this Section, or before a contract shall be cancelled or terminated in whole or in part under subsection (a)(5) of this Section.



[Sec. 209 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 210. Whenever the Secretary of Labor makes a determination under Section 209, the Secretary shall promptly notify the appropriate agency. The agency shall take the action directed by the Secretary and shall report the results of the action it has taken to the Secretary of Labor within such time as the Secretary shall specify. If the contracting agency fails to take the action directed within thirty days, the Secretary may take the action directly.

[Sec. 210 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p 230]

SEC. 211. If the Secretary shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless the bidder or prospective contractor has satisfactorily complied with the provisions of this Order or submits a program for compliance acceptable to the Secretary of Labor. [Sec. 211 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 212. When a contract has been cancelled or terminated under Section 209(a)(5) or a contractor has been debarred from further Government contracts under Section 209(a)(6) of this Order, because of noncompliance with the contract provisions specified in Section 202 of this Order, the Secretary of Labor shall promptly notify the Comptroller General of the United States.

[Sec. 212 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart E - Certificates of Merit

SEC. 213. The Secretary of Labor may provide for issuance of a United States Government Certificate of Merit to employers or labor unions, or other agencies which are or may hereafter be engaged in work under Government contracts, if the Secretary is satisfied that the personnel and employment practices of the employer, or that the personnel, training, apprenticeship, membership, grievance and representation, upgrading, and other practices and policies of the labor union or other agency conform to the purposes and provisions of this Order.

SEC. 214. Any Certificate of Merit may at any time be suspended or revoked by the Secretary of Labor if the holder thereof, in the judgment of the Secretary, has failed to comply with the provisions of this Order.

SEC. 215. The Secretary of Labor may provide for the exemption of any employer, labor union, or other agency from any reporting requirements imposed under or pursuant to this Order if such employer, labor union, or other agency has been awarded a Certificate of Merit which has not been suspended or revoked.

Part III - Nondiscrimination Provisions in Federally Assisted Construction Contracts

SEC. 301. Each executive department and agency, which administers a program involving Federal financial assistance shall require as a condition for the approval of any grant, contract, loan, insurance, or guarantee thereunder, which may involve a construction contract, that the applicant for Federal assistance undertake and agree to incorporate, or cause to be incorporated, into all construction contracts paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to such grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the provisions prescribed for Government contracts by Section 202 of this Order or such modification thereof, preserving in substance the contractor's obligations thereunder, as may be approved by the Secretary of Labor, together with such additional provisions as the Secretary deems appropriate to establish and protect the interest of the United States in the enforcement of those obligations. Each such applicant shall also undertake and agree (1) to assist and cooperate actively with the Secretary of Labor in obtaining the compliance of contractors and subcontractors with those contract provisions and with the rules, regulations as the Secretary may require



for the supervision of such compliance, (3) to carry out sanctions and penalties for violation of such obligations imposed upon contractors and subcontractors by the Secretary of Labor pursuant to Part II, Subpart D, of this Order, and (4) to refrain from entering into any contract subject to this Order, or extension or other modification of such a contract with a contractor debarred from Government contracts under Part II, Subpart D, of this Order.

[Sec. 301 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 302."Construction contract" as used in this Order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

(b) The provisions of Part II of this Order shall apply to such construction contracts, and for purposes of such application the administering department or agency shall be considered the contracting agency referred to therein.

(c) The term "applicant" as used in this Order means an applicant for Federal assistance or, as determined by agency regulation, other program participant, with respect to whom an application for any grant, contract, loan, insurance, or guarantee is not finally acted upon prior to the effective date of this Part, and it includes such an applicant after he/she becomes a recipient of such Federal assistance.

SEC. 303. The Secretary of Labor shall be responsible for obtaining the compliance of such applicants with their undertakings under this Order. Each administering department and agency is directed to cooperate with the Secretary of Labor and to furnish the Secretary such information and assistance as the Secretary may require in the performance of the Secretary's functions under this Order.

(b) In the event an applicant fails and refuses to comply with the applicant's undertakings pursuant to this Order, the Secretary of Labor may, after consulting with the administering department or agency, take any or all of the following actions: (1) direct any administering department or agency to cancel, terminate, or suspend in whole or in part the agreement, contract or other arrangement with such applicant with respect to which the failure or refusal occurred; (2) direct any administering department or agency to refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred of future compliance has been received by the Secretary of Labor from such applicant; and (3) refer the case to the Department of Justice or the Equal Employment Opportunity Commission for appropriate law enforcement or other proceedings.

(c) In no case shall action be taken with respect to an applicant pursuant to clause (1) or (2) of subsection (b) without notice and opportunity for hearing.

[Sec. 303 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 304. Any executive department or agency which imposes by rule, regulation, or order requirements of nondiscrimination in employment, other than requirements imposed pursuant to this Order, may delegate to the Secretary of Labor by agreement such responsibilities with respect to compliance standards, reports, and procedures as would tend to bring the administration of such requirements into conformity with the administration of requirements imposed under this Order: Provided, That actions to effect compliance by recipients of Federal financial assistance with requirements imposed pursuant to Title VI of the Civil Rights Act of 1964 shall be taken in conformity with the procedures and limitations prescribed in Section 602 thereof and the regulations of the administering department or agency issued thereunder.

Part IV - Miscellaneous

SEC. 401. The Secretary of Labor may delegate to any officer, agency, or employee in the Executive branch of the Government, any function or duty of the Secretary under Parts II and III of this Order.



[Sec. 401 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 402. The Secretary of Labor shall provide administrative support for the execution of the program known as the "Plans for Progress."

SEC. 403. Executive Orders Nos. 10590 (January 19, 1955), 10722 (August 5, 1957), 10925 (March 6, 1961), 11114 (June 22, 1963), and 11162 (July 28, 1964), are hereby superseded and the President's Committee on Equal Employment Opportunity established by Executive Order No. 10925 is hereby abolished. All records and property in the custody of the Committee shall be transferred to the Office of Personnel Management and the Secretary of Labor, as appropriate.

(b) Nothing in this Order shall be deemed to relieve any person of any obligation assumed or imposed under or pursuant to any Executive Order superseded by this Order. All rules, regulations, orders, instructions, designations, and other directives issued by the President's Committee on Equal Employment Opportunity and those issued by the heads of various departments or agencies under or pursuant to any of the Executive orders superseded by this Order, shall, to the extent that they are not inconsistent with this Order, remain in full force and effect unless and until revoked or superseded by appropriate authority. References in such directives to provisions of the superseded orders shall be deemed to be references to the comparable provisions of this Order.

[Sec. 403 amended by EO 12107 of Dec. 28, 1978, 44 FR 1055, 3 CFR, 1978 Comp., p, 264]

SEC. 404. The General Services Administration shall take appropriate action to revise the standard Government contract forms to accord with the provisions of this Order and of the rules and regulations of the Secretary of Labor.

SEC. 405. This Order shall become effective thirty days after the date of this Order.

EXECUTIVE ORDER 13496

New Employee Notification Requirements for Federal Contractors and Subcontractors

Under Department of Labor regulations, <u>www.gpo.gov/fdsys/pkg/FR-2010-05-20/pdf/2010-11639.pdf</u>, contractors holding contracts with the Federal government and their subcontractors are required, beginning on June 21, 2010, to post notices informing employees of their rights under the National Labor Relations Act (NLRA). The notice to employees required by the regulations inform employees about their rights under the NLRA to form, join and assist a union and to bargain collectively with their employer; provides examples of unlawful employer and union conduct that interferes with those rights; and indicates how employees can contact the National Labor Relations Board, the Federal agency that enforces those rights, with questions or to file complaints. Contractors that violate the Labor Department's regulations requiring employee notification of these rights may be subject to sanctions, including suspension or cancellation of the contract.

The regulations require Federal contractors:

- 1. to post the required employee notice conspicuously in and around their plants and offices so that it is prominent and readily seen by employees who are covered by the NLRA and who engage in contract-related activity;
- 2. to post the required notice electronically if they communicate with employees electronically, which requires posting a link to the Department of Labor's website containing the employee notice where they customarily place other electronic notices to employees about their jobs; and
- 3. to insert provisions in their subcontracts that require their subcontractors to comply with the same posting requirements as well.

Contractors and subcontractors may obtain the required poster in any of the three ways. The Labor Department will print posters and provide them to Federal contracting departments and agencies for supply to contractors and subcontractors. In addition, contractors and subcontractors can request posters from the field offices of the Labor Department's Office of Federal Contract Compliance Programs (http://www.dol.gov/ofccp/contacts/ofnation2.htm), or Office of Labor-Management Standards (OLMS) (http://www.dol.gov/olms/contacts/lmskeyp.htm). Finally, contractors and subcontractors can acquire the poster from OLMS' website by downloading it from http://www.dol.gov/olms or by calling (202) 693-0123. Compliance information for contractors and subcontractors can be found at OFCCP's website Construction Compliance Checks Frequently Asked Questions | U.S. Department of Labor (dol.gov)

EXECUTIVE ORDER 13496 - FREQUENTLY ASKED QUESTIONS

Executive Order 13496 Frequently Asked Questions | U.S. Department of Labor (dol.gov)



REQUIREMENTS FOR PUBLIC WORKS PROJECTS

REQUIREMENTS FOR PUBLIC WORKS PROJECTS – All projects require that the contractor and all subcontractors performing labor on the project site must file the Statement of Intent with L&I regardless of the wage determination is set as HUD Non-Routine Maintenance, State Prevailing wages or Davis-Bacon.

<u>Statement of Intent to Pay Prevailing Wages</u> - filed at the start of the project

- A. **Filed Immediately** after the contract is awarded and before work begins, if that is possible. **NO PAYMENTS CAN BE MADE** until the contractor has submitted an Intent form that has been approved by the Industrial Statistician.
- B. SUBCONTRACTORS must file using the PRIME CONTRACTOR'S "Form ID Number" after the PRIME has received approval for their Statement of Intent.
- C. Wage payment requirements for this project are determined to be
 - 1. Davis-Bacon (NA)

2. HUD Non-Routine Maintenance

- a. The Intent is then filed with the question "Is this a Housing Act of 1937 Project?" answered as **Yes.**
- b. See the Informational Form A.13b for the sample of Intent to Pay Prevailing Wages with the highlighted statement shown on the form.

Certified Payroll - filed each week for the duration of the project

- A. Submitted on a weekly basis, beginning with the first week that the Contractor works on the Project, and for every week afterward until the Contractor completes the Work.
- B. Consisting of a certified payroll report and a statement of compliance.
- C. See Informational Form A.13c for more information. *NOTE:* These requirements will also apply to HUD Non-Routine Maintenance Wages.

Affidavit of Wages Paid - filed at the end of the project

A. Submitted at the end of the project once all of the work has been completed, showing the wages paid to employees who worked on the project.



KCHA – NORTHWOOD SQUARE SITE AND STORAGE CAPITAL CONSTRUCTION DEPARTMENT

SCREEN SHOTS OF INTENT

File Intent: Enter the Project Details	
STEP 1 STEP 2 STEP 3 Select Project Details Intent Details	STEP 4STEP 5STEP 6Add WagesReview IntentPayment Details
Project Details	
Contract Type	Bid–Build (Traditional)
Bid Due Date (required) (i)	mm/dd/yyyy
Contract Award Date (required)	mm/dd/yyyy
Awarding Agency	KING COUNTY HOUSING AUTHORITY
Awarding Agency Address	700 ANDOVER PARK SW TUKWILA, WA - 98188
Awarding Agency Contact Name (required)	
Awarding Agency Contact Phone Number (required)	Ext
Awarding Agency Contract Number (required) (i)	
Project Name (required)	
Is apprentice utilization required? (required)	○ Yes ○ No
Is OMWBE utilization required? (required)	🔍 Yes 🔍 No
Is this a Housing Act of 1937 project? (required)	Yes No
Project Site Address or Directions i	



REQUIREMENTS FOR CERTIFIED PAYROLL per CFR TITLE 29 SUBTITLE A DAVIS BACON & RELATED ACTS PROVISIONS & PROCEDURES

§ 5.5 Contract provisions and related matters.

- (a) The Agency head shall cause or require the contracting officer to insert in full in any contract in excess of \$2,000 which is entered into for the actual construction, alteration and/or repair, including painting and decorating, of a public building or public work, or building or work financed in whole or in part from Federal funds or in accordance with guarantees of a Federal agency or financed from funds obtained by pledge of any contract of a Federal agency to make a loan, grant or annual contribution (except where a different meaning is expressly indicated), and which is subject to the labor standards provisions of any of the acts listed in § 5.1, the following clauses (or any modifications thereof to meet the particular needs of the agency, *Provided*, That such modifications are first approved by the Department of Labor):
 - (1) Minimum wages.
 - (i) All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (a)(1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in § 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under paragraph (a)(1)(ii) of this section) and the Davis- Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.
 - (ii)
- (A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:
 - (1) The work to be performed by the classification requested is not performed



by a classification in the wage determination; and

- (2) The classification is utilized in the area by the construction industry; and
- (3) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.
- (B) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.
- (C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30- day period that additional time is necessary.
- (D) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs (a)(1)(ii) (B) or (C) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.
- (iii) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.
- (iv) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided*, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.
- (2) *Withholding*. The King County Housing Authority shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contract or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of



the wages required by the contract, the (Agency) may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

- (3) Payrolls and basic records.
 - (i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis- Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.
 - (ii)
- (A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the King County Housing Authority if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the King County Housing Authority. The payrolls submitted shall set out accurately and completely all of the information required to be

maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the King County Housing Authority if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the King County Housing Authority, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).



- (B) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:
 - (1) That the payroll for the payroll period contains the information required to be provided under § 5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under § 5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;
 - (2) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;
 - (3) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract.
- (C) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph (a)(3)(ii)(B) of this section.
- (D) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.
- (iii) The contractor or subcontractor shall make the records required under paragraph (a)(3)(i) of this section available for inspection, copying, or transcription by authorized representatives of the King County Housing Authority or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the Federal agency may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.
- (4) Apprentices and trainees -
 - (i) Apprentices. Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above,



KCHA – NORTHWOOD SQUARE SITE AND STORAGE CAPITAL CONSTRUCTION DEPARTMENT

shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

- (ii) Trainees. Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.
- (iii) Equal Employment Opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.
- (5) *Compliance with Copeland Act requirements.*. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.



- (6) *Subcontracts*. The contractor or subcontractor shall insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as the (write in the name of the Federal agency) may by appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.
- (7) *Contract Termination: Debarment*. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.
- (8) *Compliance with Davis-Bacon and Related Act requirements.* All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.
- (9) Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.
- (10) Certification of eligibility.
 - (i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis- Bacon Act or 29 CFR 5.12(a)(1).
 - (ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
 - (iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.
- (b) *Contract Work Hours and Safety Standards Act.* The Agency Head shall cause or require the contracting officer to insert the following clauses set forth in paragraphs (b)(1), (2), (3), and (4) of this section in full in any contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by § 5.5(a) or § 4.6 of part 4 of this title. As used in this paragraph, the terms *laborers* and *mechanics* include watchmen and guards.
 - (1) *Overtime requirements*. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.
 - (2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (b)(1) of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (b)(1) of this section, in the sum of \$29 for each calendar day on which such individual was required or permitted to



B - SECTION

NORTHWOOD SQUARE SITE AND STORAGE

529 8th Street NE, Auburn, WA 98002 **DUE DATE:** April 5, 2023 **TIME:** 1:00 pm

In order to be considered as **RESPONSIVE BIDS**, all bidders **MUST** submit the following <u>Signed</u> <u>Documents (each single sided)</u> no later than the **Bid Due Date and Time**.

Forms to Return if Bidding

- **B.1** Bid Form
- **B.2** Bidder's Experience Record
- **B.3** Contractor Certification
- **B.4** Non-Collusive Affidavit
- **B.5** Equal Opportunity
- **B.6** Bid Security (Submit only for bids greater than \$150,000)
- **B.7** Debarment / Suspension Compliance Certification
- **B.8 Proposed Subcontractor List**
- **B.9** Section 3
 - a. Business Certification
 - b. Subcontractor Work Plan
- **B.10** Harassment and Discrimination Policies
- **B.11** WMBE Survey (Form is not required to be responsive, but requested)
- **B.12 <u>Preliminary</u> Project** Schedule Provided by Contractor



BID FORM – RETURN EACH FORM SINGLE SIDED

BID TO:

KING COUNTY HOUSING AUTHORITY CAPITAL CONSTRUCTION DEPARTMENT 700 Andover Park West, Suite C * Tukwila, WA 98188

PROJECT NAME AND LOCATION:

Northwood Square Site and Storage 529 8th Street NE, Auburn, WA 98002

SCOPE OF WORK:

Northwood Square was built in 1978, with an envelope upgrade completed in 2018. The resident population is a diverse population of families and children which will remain occupied throughout construction.

Storage Shed: Work will include demolishing 24 existing storage shed closets at the unit, including removal of roofing, siding, sheathing (T & G), and cutting concrete slabs. The new structure will include a new foundation, 2x4 wall framing, 2x6 rafters, roof shingles, exterior and interior sheathing, WRB, fiber cement siding, and trim. The new storage units will be framed with all associated hardware and PT materials as noted on plans to accommodate a 3'-0" x 6'-8" exterior door and hardware. The existing fire extinguisher cabinets will be salvaged and incorporated into the new wall framing. They will be recessed as noted on plan page A6.1.

Site Work: Work includes the removal of selected sidewalks, asphalt pavement, and landscaping to incorporate a new drainage system that will connect to the existing storm drain system. The Contractor will be responsible for removing existing chain link fencing to access the locations around the building. Any excavation performed during the day will be covered and secured at the end of each work day.

An ADA ramp, including handrails, will be installed at the south elevation of Building B (Manager's Office). A new ramp and stairs will be installed at the North Elevation laundry room. Each location will include removing and replacing existing siding, relocating the current recessed fire extinguisher cabinets, and infill framing as needed. The Contractor will be responsible for all forms, rebar, and vertical sheet waterproofing applied between existing buildings and new concrete. Refer to detail page A5.5.

The selective asphalt areas noted on the plans will be removed and replaced to allow the connection of the new storm lines into the main storm drain connection as well as room to form new sidewalk areas. Pressure washing of the entire parking will be completed before the seal coat of the entire parking lot. Parking lot painting will include restriping, numbering, painting of ADA markings curb painting, and no-parking striping at the North end of Building B. The existing ADA signage will be salvage and re-installed using Ulti-Mate perforated steel square sign posts. Posts will be set in concrete a minimum of 24" and 5' to center of sign. The existing wheel stops located outside the basketball court will be removed for seal coating and re-installed and painted to match the current condition. The Contractor must submit a phasing plan for KCHA approval and integrate it into the master schedule prior to work commencing. KCHA expects the site and landscaping to be fully restored at the completion of the project.

For complete scope, please see E.1 Scope of Work and Technical Specifications

Bidding Contractor's Company Name:____



BASE BID:

Bidders must provide a cost for **each and every** bid item (even if the amount is **\$0.00**), for the bid to be considered responsive. Where conflict occurs between the bid item values entered and the total amount written, the bid item price(s) shall prevail, and totals will be corrected to conform thereto. The work of the various items is described throughout the Contract Documents.

Total Base Bid Lump Sum Amount (Gross Contract Price) should include all applicable taxes. King County Housing Authority (KCHA) will only pay this Gross Contract Price. Contractors shall review the State of Washington Department of Revenue Ruling WAC 458-20-17001 (included in bid documents) and all other applicable documents for tax obligations.

Contractor must pay the attached \Box Davis Bacon / \boxtimes Non-Routine Maintenance as the Minimum Wages and Fringe Benefits for the construction workers under this contract.

The Bidder agrees to accept as full payment for the Work, as specified in the Contract Documents, and based upon the undersigned's own estimate of quantities and costs, the following stipulated sums.

BASE E	SID PRICE	
A.	Materials, including all applicable Taxes	\$
В.	Labor	\$
C.	O & P, including all applicable Fees	\$
D.	Owner Allowance for added work contingency, as authorized by	\$35,000,00
D.	КСНА	\$35,000.00
TOTAL	BID AMOUNT: (all costs inclusive – A, B, C& D)	¢
	Round to Nearest Dollar	\$
		And No/100 Dollars
PRINT (i	n words) Total Bid Amount. Sample – Three Hundred Thousand, Two Hundred Si:	xty-Six

ADDITIONAL COVID-19 REQUIREMENTS

Should there be new COVID-19 requirements instituted by the State or County prior to the bid date, they will be addressed in an Addendum.

UNIT PRICES:

Unit prices are considered for use when small quantities are needed and additional competitive bidding is not required for price justification. An unforeseen condition requiring large quantities resulting in a substantial change in scope of new work will not be considered applicable for unit pricing. Large deviations in the scope of work will be addressed and evaluated through a bid process or on a Time Material basis as stipulated in the contract documents. Acceptance of any unit pricing is at the Owner's discretion.

COMPLETE BID:

Contractor shall include all costs of doing the work shown, described, and intended by the Contract Documents, within the lump sum bid prices in the Proposal.

LOW BIDDER DETERMINATION:

The determination of the Low Bidder will be determined on the basis of the Grand Total of the Total Base Bid Price plus Owner-Directed Work Total. The Owner reserves the right to accept any, all, or no Additive items at the time of Award, or at any time thereafter.

Bidding Contractor's Company Name:_

Initials:



RIGHT TO AWARD THE CONTRACT:

KCHA reserves the right to award the Contract to the Contractor based on the Contractor's Qualifications, Bonding Capacity and ability to Complete the Project within the Completion Time allowed for project. If written notice of the acceptance of this bid is mailed, or delivered to the undersigned within Seven (7) days after the opening thereof, or at any time thereafter before this bid is withdrawn, the undersigned agrees to execute and deliver a Contract in the prescribed form within Seven (7) calendar days after the Contract is presented for signature.

RIGHT TO REJECT BIDS:

KCHA Reserves the Right to Reject any and all Bids and select any bid options (Base Bid/Alternate Bid or both). In addition, KCHA Reserves the Right to Refuse to Award a Bid to a Contractor based on the Contractor's Past Performance, and/or Unresolved Issues with KCHA, as well as unresolved issues with Washington State Labor & Industries. No Extension of Completion is allowed.

KCHA also Reserves the Right to Reject all bids, for any reason, prior to Contract Execution.

The undersigned hereby agrees that this proposal shall be a Valid and Firm Offer for the following calendar days from the date of the Bid Opening.

Calendar Days: <u>SIXTY (60)</u>

If the Contractor's Bid is determined to be "Not Responsible", KCHA will issue in writing the specific reasons for this determination. Your company will be allowed to appeal this decision. The appeal must be in writing. The appeal must be delivered to KCHA at the address provided in the determination of 'Not Responsible' within two (2) business days after KCHA makes the decision. The appeal may include additional information that was not included in the original Bid Documents. KCHA will make a final determination after the receipt of the appeal. The final determination may not be appealed.

ADDENDUM RECEIPT: (Receipt of the following Addenda is acknowledged)

Addendum No.:	Date:
Addendum No.:	Date:
Addendum No.:	Date:
Addendum No.:	Date:
NO ADDENDA were received	

START TIME OF CONSTRUCTION:

Construction for the project must be started in accordance with the written Notice to Proceed Date issued by KCHA.

COMPLETION TIME OF CONSTRUCTION:

The undersigned hereby agrees to significantly complete the project within the construction period or duration (**Construction Period/Duration: NTP "construction start" to physical completion**) all the work required under the Contract and in accordance with the Contract Documents. Time allowed to complete the project (including punch list items) shall be the following number of Calendar Days from the Notice to Proceed Date issued by KCHA:

Bidding Contractor's Company Name:____



Calendar Days: <u>NINETY (90)*</u>

* This is total construction time and does not include any delays that may be caused by supply chain issues.

PRELIMINARY SCHEDULE:

MANDATORY: Contractor is to **provide** a preliminary Master Project Schedule in Microsoft Project, Primavera or similar and will include task durations and a project duration/completion date **at time of bid**.

METHOD OF PAYMENT:

Contract Amount shall be paid by KCHA to the Contractor monthly from the date of Contract, based on Contractor's Invoice of percentage of 'Completion'. Contractor shall use the AIA-G702 and G703 forms for Application and Certificate for Payment for Invoice Submittal.

CONTRACT RETENTION:

KCHA will withhold Contract Retention at the following Rate, pursuant to the General Conditions and will be released upon receipt of the Proper clearances from all pertinent state agencies. Release of Retention will not be made until All Requirements for Release, including clearances from State Agencies are received.

Retention Rate:FIVE PERCENT (5%)

CLOSEOUT PERCENTAGE:

Contractor to include in his Schedule of Values **Closeout Costs**; this is a percentage of the contract bid amount for costs associated with closing out the project as described in Section 01 77 00.

Closeout Percentage: <u>TWO AND ONE-HALF PERCENT (2.5%)</u>

LIQUIDATED DAMAGES:

Timely performance and completion of the Work is essential to the Owner and time limits stated in the Agreement are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work or Contract Completion of the entire project does not occur in the time limits defined in the Contract or subsequent change order. Liquidated damages are not assessed as a penalty, but as liquidated damages for breach of contract. The amount is fixed and agreed upon by the Contractor and Owner due to the extreme difficulty and impracticability of fixing and ascertaining the actual damages the Owner would sustain.

This amount is construed as actual amount of damages to the Owner and may be retained by the Owner and deducted from any payments to the Contractor. Assessment of liquidated damages does not release the Contractor for obligations in the Agreement. If different and separate completion dates are stated in the Agreement (or subsequent change order) for separate parts or stages of the Work, the amount of liquidated damages shall apply and may be assessed on those parts or stages of the Work which are delays.

If the Contractor fails to complete the Work by the Time for Substantial Completion stated above (or amended by a subsequent change order), then the Contractor agrees to abide by all provision of the

Liquidated Damages clause to the Contract. Liquidated Damages shall be in the following DOLLAR AMOUNT per Calendar Days and will be assessed for each day that the Contractor exceeds the time for substantial completion stated above as follows:

Dollar Amount: <u>FIVE HUNDRED DOLLARS AND NO/100 (\$500.00)</u>

Bidding Contractor's Company Name:___

Initials:

INDEMNIFICATION AND HOLD HARMLESS:

The Contractor hereby agrees that, to the fullest extent permitted by law, it will defend, indemnify and hold KCHA and its officials, partners, volunteers, agents and employees (the "Indemnities") harmless from and against any and all claims, losses, damages and expenses, including attorney's fees incurred with respect thereto or in enforcing this indemnity, which in any manner arise out of or in connection with, or result from:

- 1. The Work to be performed pursuant to this contract (the 'Work'), or
- 2. Any Act or Omission of:
 - a. The Contractor;
 - b. Any Subcontractor, Lower Tier Contractor, or Supplier engaged with respect to the Work;
 - c. Any other party acting at the direction, at the request or under the control of the Contractor with respect to this contract or the Work; or
 - d. The Officers, Directors, Partners, Employees, Volunteers or Agents of any of the foregoing, or the successors in interest of any of them.

Notwithstanding the foregoing, however, the Contractor shall not be required to indemnify and Indemnitee against liability for damages arising out of bodily injury to persons or damage to property caused by or resulting from the intentional misconduct or sole negligence of the Indemnitee, and if such damages are caused by or result from the concurrent negligence of the Indemnitee and the Contractor or its employees or agents, then the Contractor's indemnity hereunder shall be limited to the extent of the negligence of the Contractor or its employees or agents. For purposes of this Indemnity, the Contractor waives its immunity under industrial insurance, Title 51 of the Revised Code of Washington, and acknowledges that the parties have negotiated this waiver for the purposes of this agreement.

The Contractor hereby agrees to require all its Subcontractors or anyone acting under its direction or control or on its behalf in connection with or incidental to the performance of this contract to execute an indemnity agreement substantively identical to the proceeding one, specifically naming KCHA as an indemnitee, and the Contractor's failure to do so shall constitute a material breach of this contract by the Contractor.

LOCAL RESIDENCE HIRING AND CONTRACTING REQUIREMENTS FOR SECTION 3:

The undersigned agrees to adhere to the Local Resident Hiring and Contracting Requirements as defined in the Section 3 Documents. Failure to comply with this program "to the greatest extent feasible" may result in the withholding of progress payments until the breach of the contract is remedied. See Section 3 Certification Forms attached.

I certify, under penalty of perjury, that my company	Is a Section 3 Business
	Is Not a Section 3 Business

(For further clarification for Section 3 Certification, refer to Sections A.8 and B.10.a)

BID WITHDRAWAL AFTER BID OPENING:

1. A bidder who submits an erroneous low bid may withdraw the bid at the risk of forfeiting the bid bond. The bid withdrawal is permissible if there was an obvious error in the low bid and the mistake is readily apparent from the bid itself. The bidder must notify KCHA and submit evidence of the error within twenty-four (24) hours of the bid opening.

Bidding Contractor's Company Name:___

Initials:



- 2. Evaluating factors for return or forfeiture of bid bonds should include:
 - a. Whether the bidder acted in good faith;
 - b. Whether the bidder acted without gross negligence;
 - c. Whether the bidder gave prompt notice of the error;
 - d. Whether the bidder will suffer substantial detriment by forfeiture;
 - e. Whether KCHA's status has not greatly changed, and no substantial hardship will be caused.
- 3. Any low bidder who withdraws its bid is prohibited from bidding on the same project if it is subsequently re-solicited.

NOTIFICATION:

Contractors submitting bids must have current industrial insurance and not be disqualified from bidding (not suspended or debarred by any federal, state, or other public agency).

All or a portion of this contract is paid for by Federal Funds. As a result, Successful Contractors are subject to the following statures: Section 504 of the Rehabilitation Act of 1973; the Americans with Disabilities Act of 1990; the Architectural Barriers Act of 1968 and the Fair Housing Act of 1988.

It will be the Contractor's obligation to comply with pertinent laws and implementing regulations, which provide for non-discrimination and accessibility in Federally Funded Housing and Non-Housing Programs for people with Disabilities. To read the full text of the Notice go to Go to www.kcha.org/business/requirements_Scroll down to Fair Housing Laws and Read: <u>Fair Housing /</u><u>Accessibility Notice</u>

The undersigned acknowledges:

- 1. To have carefully reviewed and understood the scope of work and requirements under the Contract Documents and the complete scope of work as required under the Bid Proposal,
- 2. To have been provided the opportunity to physically assess the project site,
- 3. And affirms that the bid entered herein, shall be a complete bid in accordance with the terms of the Contract Documents,
- 4. And hereby agrees to complete the Work required under the terms of the Contract Documents by the Completion Dates enumerated therein, and
- 5. That all Documents Submitted to KCHA will become Public Records, as per RCW 42.56. If you are submitting information, which you think is confidential and / or proprietary to your business; KCHA recommends that you do not submit that information, as KCHA cannot guarantee that type of information will be withheld from a public disclosure request.



COMPANY INFORMATION (please print all information):

Name of Bidder's Company	
Physical Street Address: (Contractor MUST have a Physical Street Address)	
City-State-Zip:	
Mailing Address if different than Physical:	
City-State-Zip:	
Telephone:	
Name of Person Authorized to Sign Contract: (<i>if Company is Awarded Contract</i>)	
Title of Person Authorized to Sign Contract: (<i>if Company is Awarded Contract</i>)	
Email Address of Person Authorized to Sign Contract: (<i>if Company is Awarded Contract</i>)	
Website:	
Contractor's License (WA State) Number:	
UBI (Unified Business License) Number:	
Employment Security Account Number:	
State Excise Tax Registration Number:	
Federal Tax I.D. Number:	

Bidding Contractor's Company Name:____

_____ Initials: _____



BIDDER'S EXPERIENCE RECORD – RETURN EACH FORM SINGLE SIDED

KCHA WILL AWARD CONTRACTS ONLY TO RESPONSIBLE PROSPECTIVE CONTRACTORS WHO HAVE THE ABILITY TO PERFORM SUCCESSFULLY UNDER THE TERMS AND CONDITIONS OF THE PROPOSED CONTRACT. *PRINT ALL INFORMATION*.

ATTACH ADDITIONAL SHEETS AS NECESSARY TO FULLY PROVIDE THE INFORMATION REQUIRED.

NAME OF BIDDER:						
PHYSICAL ADDRESS	5:					
CITY-STATE-ZIP:						
MAILING ADDRESS:						
CITY-STATE-ZIP:						
CONTRACTOR'S LICENSE NUMBER:	(Must be a valid V	VA State License)	EMPLOYM SECURITY	NUMBER:		
BOND REGISTRATION NUMBER:			L&I's WOR COMP. AC			
L&I PUBLIC WORKS TRAINING:	YES	NO				
BIDDER IS A(N):	INDIV	IDUAL	PAR	TNERSHIP		
	JOINT VEN	NTURE	INCORF	ORATION	IN STATE O	F
CONTINUOUSLY	Y BEEN IN BUS FROM		N	IO. OF REGU	LAR FULL TI EMPLOYE	
TOTAL NUMBER OF H	PROJECT COMP	PLETED IN THE	E PAST 5 YE	ARS		
NUMBER OF PROJEC	IS COMPLETEI)	AHEAD	O	N-TIME	BEHIND
BIDDER HAS HAD EX AS FOLLOWS: AS P						S PROJECT
BIDDERS LIST THE FO		ORMATION: P	'RINT ALL .	INFORMATI	ION	
NAME OF BONDING	COMPANY:					
	ADDRESS:					
PHON	E NUMBER:					
CONTAC	CT PERSON:					
	CAPACITY:					



HOW LONG

LIST THE SUPERVISORY PERSONNEL TO BE EMPLOYED BY THE BIDDER AND AVAILABLE FOR, AND INTENDED TO WORK ON THIS PROJECT (PROJECT MANAGER, PRINCIPAL FOREPERSON, SUPERINTENDENTS AND ENGINEERS): **PRINT ALL INFORMATION**

NAME	TITLE	WITH BIDDER
LIST ALL PUBLICLY FUNDED PROJECTS O WITHIN THE PAST 5 YEARS. INCLUDE A SEPARATE SHEET(S), USING THE FORMAT B	REFERENCE FOR EACH. IF M	NECESSARY, ATTACH A
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
TOTAL CONTRACT AMOUNT:		
IF SUB, YOUR CONTRACT AMOUNT:		
YEAR PROJECT COMPLETED:		
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
TOTAL CONTRACT AMOUNT:		
IF SUB, YOUR CONTRACT AMOUNT:		
YEAR PROJECT COMPLETED:		
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
TOTAL CONTRACT AMOUNT:		
IF SUB, YOUR CONTRACT AMOUNT:		
YEAR PROJECT COMPLETED:		
PROJECT NAME:		
OWNER/CONTACT NAME & NUMBER:		
TOTAL CONTRACT AMOUNT:		
IF SUB, YOUR CONTRACT AMOUNT:		

IF ANY OF THE PROJECTS LISTED ABOVE WERE NOT COMPLETED WITHIN THEIR ORIGINALLY SCHEDULED PERIOD, EXPLAIN WHY: **PRINT ALL INFORMATION**

LIST ALL PROJECTS UNDERTAKEN IN THE LAST 5 YEARS WHICH HAVE RESULTED IN PARTIAL OR FINAL SETTLEMENT OF THE CONTRACT BY ARBITRATION OR LITIGATION IN THE COURTS: **PRINT ALL INFORMATION**

NAME OF CLIENT & PROJECT	CONTRACT AMT.	TOTAL CLAIM ARBITRATED / LITIGATED	AMT. OF SETTLEMENTS OF CLAIM

HAS BIDDER, OR ANY REPRESENTATIVE OR PARTNER THEREOF, EVER FAILED TO COMPLETE A CONTRACT? **PRINT ALL INFORMATION**

NO YES

IF YES, EXPLAIN

HAS THE BIDDER EVER HAD ANY PAYMENT / PERFORMANCE BOND CALLED AS A RESULT OF THIS WORK? **PRINT ALL INFORMATION**

NO YES IF YES, COMPLETE THE FOLLOWING:

	PROJECT N	JAME	CONTRACTING PARTY	BOND AMOUNT
		EN FOUND GUILTY F ORMATION	OF VIOLATING ANY STATE OR FEDE	RAL EMPLOYMENT
NO	YES	IF YES, EXPI	_AIN	
			CTION UNDER ANY PROVISION CY LAWS? PRINT ALL INFORMATIO	
NO	YES	IF YES, EXPI	LAIN	

_



VEC

NO

HAS ANY ADVERSE LEGAL JUDGEMENT RELATED TO CONSTRUCTION BEEN RENDERED AGAINST THE BIDDER IN THE LATE 5 YEARS? **PRINT ALL INFORMATION**

TE VEC EVELADI

NO	IES	IF	IES, EXPLAIN			
S BIDD	ER OR	ANY OF ITS	EMPLOYEES FILEI	O ANY C	CLAIMS WITH WAS	SHINGTON STATE
ORKER'S	S COMPE	NSATION OR	OTHER INSURANC	E COMPA	ANY FOR ACCIDEN	FS RESULTING IN
ATAL INJ	URY OR I	DISMEMBERM	IENT IN THE PAST 5	YEARS?	PRINT ALL INFORM	IATION
NO	YES I	F YES, COMPL	ETE THE FOLLOWING	G:		
DATE	E	TY	PE OF INJURY		AGENCY REC	EIVING CLAIM
	<u> </u>					
			ATION RATE (EMR):	2019	2020	2021

(IF BIDDER IS SELF-INSURED, ATTACH PROOF OF EMR STATED, SHOWING COMPLETE WORKSHEET CALCULATIONS)

NOTES TO BIDDERS: SAFETY IS A PRIMARY CONCERN ON THIS PROJECT. KCHA reserves the right to disqualify Bidders where either the current or three (3) year average of the Experience Modification Rate (EMR) EXCEEDS 1.0. KCHA may require additional information from Bidders that have an EMR of more than 1.0.

DESCRIBE ALL VIOLATION CITATIONS ISSUED AGAINST BIDDER IN THE LAST 5 YEARS UNDER OSHA, WISHA OR OTHER APPLICABLE WORKPLACE SAFETY PROGRAMS. **PRINT ALL INFORMATION**

SUBJECT OF VIOLATION	DATE OF INSPECTION / INCIDENT	OSHA ACTIVITY NO.	CLOSED / PENDING

ADDITIONAL INFORMATION:

BEFORE A BID IS CONSIDERED FOR AWARD, THE BIDDER MAY BE REQUESTED BY KCHA TO SUBMIT A STATEMENT OR OTHER DOCUMENTATION REGARDING ANY OF THE BASIC QUALIFICATIONS LISTED ABOVE. FAILURE BY THE BIDDER TO PROVIDE SUCH ADDITIONAL INFORMATION SHALL RENDER THE BIDDER NON-RESPONSIVE AND NON-RESPONSIBLE, AND INELIGIBLE FOR AWARD.

THE UNDERSIGNED WARRANTS UNDER PENALTY OF PERJURY THAT THE FOREGOING INFORMATION IS COMPLETE, TRUE AND ACCURATE TO THE BEST OF HIS / HER KNOWLEDGE. THE UNDERSIGNED AUTHORIZES THE KING COUNTY HOUSING AUTHORITY TO VERIFY ALL INFORMATION CONTAINED HEREIN. (IF THIS INFORMATION IS NOT COMPLETE AND ACCURATE THE BID MAY BE CONSIDERED NON-RESPONSIVE.)

BIDDER'S	SIGNATURE

BIDDER'S NAME (PLEASE PRINT)

BIDDER'S TITLE (PLEASE PRINT)



KCHA – NORTHWOOD SQUARE SITE AND STORAGE CAPITAL CONSTRUCTION DEPARTMENT

Authori	ty	
		Exempt
Public Works	Training (RCW39.04.350):	Not Exempt – signed Compliance Statement in Accordance with RCW 9A.72.085 is provided
	Check Box if your company is a Co	prporation and name the State Incorporated in below.
	Check Box if your company is a Pa parties below.	rtnership and provide Full Name(s) and Address of all
	Check Box if your company is also	known as (aka) and list that name and address below.
NOTE: The pe	enalty for making false statements in	offer is prescribed in 18 U.S.C. 1001.
-		-
SUBMITTED (ON: Day of	, 20

Signature of Bidder

Print Name and Title

Bidding Contractor's Company Name:

_____ Initials: _____



CONTRACTOR CERTIFICATION – RETURN EACH FORM SINGLE SIDED

PROJECT NAME: NORTHWOOD SQUARE SITE AND STORAGE

	ME OF COMPANY: YSICAL STREET ADDRESS:			
	TY - STATE - ZIP:			
MA	ILING ADDRESS:			
CIT	TY – STATE – ZIP:			
PHO	ONE NUMBER:			
FEI	DERAL TAX ID NO.:		WA STATE UBI NO.:	
TYPE	OF BUSINESS: CO	RPORATION	LLC - PARTNERSHIP	SOLE PROPRIETOR
OWN neces		List All Owners from the	inception of the Company. Use an ad	ditional sheet of paper if
	NAME OF OWNE	ER(S)	DATE(S) OF OWNE	CRSHIP (from – to)
UND	DER PENALTIES OF PERJUB	RY,I / W	e hereby certify that: (Check the	appropriate responses)
1.	I / We have a co as supplied by the King Cou		Documents and Drawings (if app	licable) for this project
2.		requirements contained	or other disabilities that would pre l in the Bid Documents to the grea ed goals.	
3.		acilities are maintained	or permitMy /Our of except for separate or single-use e sexes.	
4.	Plan in the past that required	filing reports with the C	Not participated in an Equal Em Government; and that ifI / _ Il reports due. If not, the reports	We have,I
5.			Our correct Taxpayer Iden o be issued toMe /	
6.	(a)I Am / We (b)I / We have	Are Exempt from Back not been notified by the	We are not subject to Backup up Withholding, or Internal Revenue Service (IRS) the ult of a failure to report all interes	hat I Am /



(c) the IRS has notified _____Me / _____Us that _____I Am / _____We Are no longer subject to Backup Withholding.

(If you ARE subject to Backup Withholding, leave #6 blank and go to #7)

- 7. <u>I</u> / <u>We</u> have been notified by the IRS that <u>I</u> Am / <u>We</u> Are currently subject to Backup Withholding because of under reporting interest or dividends.
 (If you filled out #6 you are *NOT* subject to Backup Withholding, leave #7 blank)
- 8. ______, who is by title the ______ of our firm/company and has been designated, as the responsible official to ensure required reports are submitted, and record keeping complies with all the applicable regulations.

AUTHORIZED OFFICIAL:

SIGNATURE

NAME (PLEASE PRINT)

TITLE (PLEASE PRINT)

DATE



NON-COLLUSIVE AFFIDAVIT – RETURN EACH FORM SINGLE SIDED

FOR CONTRACTS AND EQUIPMENT \$50,000 AND ABOVE

STATE OF WASHINGTON)) ss COUNTY OF KING)

_____, being first duly sworn, deposes and says:

That he / she is a Partner or Officer of the Firm of, etc.

The party making the forgoing proposal or bid, that such proposal or bid is genuine and not collusive or a sham; that said bidder has not colluded, conspired, connived or agreed, directly or indirectly, with any bidder or person, to put in a sham bid or to refrain from bidding, and has not in any manner, directly or indirectly, sought by agreement or collusion, or communication or conference, with any person, to fix the bid price of affiant or of any other bidder, or to fix any overhead, profit or cost element of said bid price, or of that of any other bidder, or to secure any advantage against KING COUNTY HOUSING AUTHORITY or any person interested in the proposed contract; and that all statements in said proposal or bid are true.

SIGNATURE OF AUTHORIZED OFFICIAL

Bidder, if the Bidder is an Individual

Partner, if the Bidder is a Partnership

Officer, if the Bidder is a Corporation

SUBSCRIBED AND SWORN to before me:

this _____ day of _____, 20 ____

(Signature)

(Print Name)

My Commission Expires: _____, 20____

Bidding Contractor's Company Name:

_____ Initials: _____



EQUAL OPPORTUNITY CLAUSE - RETURN EACH FORM SINGLE SIDED

DURING THE PERFORMANCE OF THIS CONTRACT, THE CONTRACTOR AGREES AS FOLLOWS:

- 1. The Contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin, citizenship status, creed, age, marital status, physical or mental disability, sexual orientation, political ideology, or status as a Vietnam era or specially disabled veteran. The Contractor will take affirmative action to ensure that applicants are employed and the employees are treated during employment without regard to the aforementioned conditions. Such action shall include, but not be limited to, the following: Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The Contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the Contracting Officer setting forth the provisions of this nondiscrimination clause.
- 2. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor, state that all qualified applicants will receive consideration for employment without regard to the aforementioned conditions of paragraph 1 above.
- 3. The Contractor will send to each labor union or representative of workers with which he/she has a collective bargaining agreement or other contract or understanding, a notice advising the labor union or workers' representative of the Contractor's commitments under Section 202 of Executive Order 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
- 4. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations and relevant orders of the Secretary of Labor.
- 5. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by the rules, regulations and relevant orders of the Secretary of Labor, or pursuant thereto, and will permit access to his/her books, records and accounts by the Owner and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations and orders.
- 6. In the event of the Contractor's non-compliance with the non-discrimination clauses of the Contract or with any of such rules, regulations or orders, this Contract may be canceled, terminated or suspended in whole or in part and the Contractor may be declared ineligible for further Government Contracts, in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rules, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
- 7. The Contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulation, or order of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Owner may direct as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Owner, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

AUTHORIZED OFFICIAL:

SIGNATURE		NAME (PLEAS	E PRINT)
TITLE (PLEASE PRINT)		DATE	
Bidding Contractor's Company Name:			Initials:
Equal Opportunity Clause Return Form – B.5	Page 1 of 1		KCHA / 10-20-22



BID SECURITY – RETURN EACH FORM SINGLE SIDED

BID DEPOSIT:

The undersigned Principal hereby deposits a Bid Deposit with the King County Housing Authority in the form of a cash deposit, certified or cashier's check, or postal money order in the amount of:

	 	Dollars (\$)
DID DOND.	 OR		
BID BOND: The undersigned,	 		(Principal), and
King County Housing Autho		urety), are held and firr	nly bound unto the

King County Housing Authority (Owner) in the penal sum of: ______ Dollars (\$_____),

which for the payment of which Principal and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally. The liability of surety under this Bid Bond shall be limited to the penal sum of this Bid Bond.

CONDITIONS:

The Bid Deposit or Bid Bond shall be an amount not less than **five percent (5%)** of the total bid, including any Alternates, Additives, and Owner-Directed Work, if any, including sales tax, if any, and is submitted by Principal to Owner in connection with a Proposal in according to the terms of the Proposal and Bid Documents for:

NORTHWOOD SQUARE SITE AND STORAGE

NOW THEREFORE:

- a. If Principal requests, in writing, to withdraw its Bid, prior to Bid Opening, or
- b. If the Proposal is rejected by Owner, or
- c. Owner in accordance with the terms of the Proposal and furnishes a bond for the faithful performance of said Project and for the payment of all persons performing labor or furnishing materials in connection therewith, with Surety or Sureties approved by Owner,

then this Bid Security shall be released; otherwise it shall remain in full force and effect and Principal shall forfeit the Bid Deposit or Surety shall immediately pay and forfeit to Owner the amount of the Bid Bond, as penalty and liquidated damages.

The obligations of Surety and its Bid Bond shall be in no way impaired or affected by any extension of time within which Owner may accept bids; and Surety does hereby waive notice of any such extension.



KCHA – NORTHWOOD SQUARE SITE AND STORAGE CAPITAL CONSTRUCTION DEPARTMENT

SIGNED AND DATED THIS	Day of	, 20
		ATTEST to Principal's Signature:
PRINCIPAL (Print Company Name)		
Signature of Authorized Official		Signature
Printed Name		Printed Name
Title (Please Print)		Title (Please Print)
Corporate Seal (if Applicable)		
		ATTEST to Surety's Signature:
SURETY (Print Company Name)		
Signature of Authorized Official		Signature
Printed Name		Printed Name
Title (Please Print)		Title (Please Print)
Corporate Seal (if Applicable)		The above is Attorney in Fact:
		Yes No (If Yes, attach Power of Attorney)
Local Office of Agent and / or S	Surety Company (please)	print):
	Name: -	
	Street Address:	
	City, State, Zip: _	

Surety Companies executing Bonds must appear on the current Authorized Insurance List in the State of Washington.

Bidding Contractor's Company Name:______ Initials: _____

DEBARMENT / SUSPENSION COMPLIANCE CERTIFICATION RETURN EACH FORM SINGLE SIDED

The Bidder certifies to the best of its knowledge and belief, that it and its principals:

- 1. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any federal department or agency;
- 2. Have not within a three (3) -year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (federal, state or local) transaction or contract under a public transaction; violation of federal or state antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- 3. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (federal, state, or local) with commission of any of the offenses enumerated in paragraph (2) of this certification; and
- 4. Have not within a three-year period preceding this application/proposal had one or more public transactions (federal, state or local) terminated for cause or default.

BIDDING COMPANY

Company Name	
Physical Street Address	
City / State / Zip	
Print Name of Authorized Official	Title
Signature of Authorized Official	Date
SUBSCRIBED AND SWORN to before me:	
this day of, 20	
(Signature)	_
(Print Name)	_
My Commission Expires:, 20	
Bidding Contractor's Company Name:	Initials:
Debarment/Suspension Compliance Page 1 of 1 Return Form – B.7	КСНА / 10-20-22



SECTION 3 – BUSINESS CERTIFICATION RETURN FORM SINGLE SIDED

THIS FORM MUST BE SIGNED AND RETURNED

Project Name:			
Company Name:			
Address:			
Contact Name:	Contact Title:		
Contact Phone:	Contact Email:		
Type of Trade or Business:			
Current Number of Regular, Full Time Employees (H	Puget Sound Region):		
1. Have over 75 percent of the labor hours performed for your business over the prior three-month period			

been performed by Section 3 workers?

Yes No If "yes" is checked, submit the section 3 Individual Certification form(s) for all the regular, full-time employees (Puget Sound Region).

2. Is **51% or more** of your business owned and controlled by low- or very low-income persons (persons who earn 80% or less of the median income level for the past 12 months - see attached income guidelines)?

Yes No If "yes" is checked, submit either the section 3 Individual Certification form(s) or the Section 3 Subcontractor Business Work Plan form.

3. Does your business provide economic opportunities for KCHA residents at the site(s) where the work will take place?

Yes No If "yes" is checked, please provide supporting documentation.

4. Does your business provide economic opportunities for residents of other KCHA developments or Section-8 assisted housing managed by KCHA?

Yes No If "yes" is checked, please provide supporting documentation.

5. Does your business provide economic opportunities to Section 3 workers residing within the metropolitan area (Puget Sound Region)?

Yes No If "yes" is checked, please provide supporting documentation.



I certify, under penalty of perjury, that my company Is Is Not a Section 3 Business.

I further certify that, **if my company is awarded the bid, and needs to hire additional employees for the project**, we will carry out Section 3 hiring, training and subcontracting requirements to the best of our ability.

Signature

Name

Title

Date

Phone Number

Email Address

If you have more specific questions about Section 3 requirements, contact KCHA at section3@kcha.org.

SECTION 3 – 2022 INCOME GUIDELINES

	In	IC0	ome Limit 1 pe	rso	on
Location	Extremely Low Income		Very Low Income		Low Income
Kitsap County (Bremerton, Silverdale)	\$21,600		\$36,050		\$57,650
King/ Snohomish Counties (Seattle, Bellevue, Everett)	\$27,200		\$45,300		\$66,750
Pierce County (Tacoma)	\$21,350		\$35,550		\$56,850
Skagit County (Sedro-Woolley)	\$18,100		\$30,150		\$48,250
Thurston County (Olympia, Tumwater)	\$21,200		\$35,350		\$56,500



	RETURN FORM SINGLE SIDED				
	CLAIMING <u>YES</u> TO QUI	RETURN THIS FORM W ESTION 3 or 4 on the SEC		FICATION FORM	1
Project Name:					
	Company Name:				
	Address:				
	Contact Name:		Contact Title:		
	Contact Phone:	_	Contact Email:		
	SECTION 3 BUSIN	ESS CONCERN	SUBCONTRACTED TASK(S)	SUBCONTRACT AMOUNT	% OF OVERALL CONTRACT
	Subcontractor's Name:				
1.	Subcontractor's Address:				
	Subcontractor's Phone No.:				
	Subcontractor's Name:				
2.	Subcontractor's Address:				
	Subcontractor's Phone No.:				
	Subcontractor's Name:				
3.	Subcontractor's Address:				
	Subcontractor's Phone No.:				
	Subcontractor's Name:				
			1	1	I

SECTION 3 – SUBCONTRACTOR WORK PLAN

Subcontractor's Phone No.:

Subcontractor's Address:

4.

TOTAL CONTRACT VALUE: _____ TOTAL SUBCONTRACT VALUE: _____

PERCENTAGE OF TOTAL BID:

For a list of Section 3 Certified Businesses, please go to: https://portalapps.hud.gov/Sec3BusReg/BRegistry/SearchBusiness



KCHA – NORTHWOOD SQUARE SITE AND STORAGE CAPITAL CONSTRUCTION DEPARTMENT

SUBCONTRACTOR - FIRST TIER	– LISTING – RETURN EACH FORM SINGLE SIDED				
NAME OF BIDDING COMPANY:					
PHYSICAL STREET ADDRESS:					
CITY / STATE / ZIP:					
1. List Approximate Percent (%) of Work Y	Your Company will actually Perform:				
2. Do You Intend on using Subcontractor(s)) for this Project? Yes No				
work that will be associated with this B completed to the best of the Bidder's	(If Yes, you must show on this form the name and information of All First Tier Subcontractors performing work that will be associated with this Bid.) Attach additional sheets if necessary. This form needs to be completed to the best of the Bidder's ability at time of bid. If Bidder is Awarded Contract a final subcontractor list will be submitted prior to Notice to Proceed. PRINT ALL INFORMATION				
SUBCONTRA	ACTOR – FIRST TIER - LIST				
Business Name:Address:Phone:	Contact: Years of Experience:				
UBI No.:					
Business Name:					
Address:					
Phone:UBI No.:					
Business Name:	Trade:				
Address:	Contact:				
Phone:UBI No.:	Years of Experience:				
Business Name:	Trade:				
Address:	Contact:				
Phone:	Years of Experience:				
UBI No.:					
The Bidder hereby certifies that the information co sheets, is accurate, complete, and current:	ontained in this Proposed Subcontractor List, including any attached				
Print Name of Authorized Official	Title				
Signature	Date				

Bidding Contractor's Company Name:_

KCHA / 10-20-22

Initials: _____



SUMMARY OF HARASSMENT AND DISCRIMINATION RETURN EACH FORM SINGLE SIDED

KCHA prohibits harassment and discrimination based on race, color, national origin, citizenship status, creed, religion, sex, age, marital or veteran's status, physical or mental disability, sexual orientation, political ideology, or any other basis protected by law ("protected status"). This policy applies to KCHA's employees, vendors, contractors, visitors and others who conduct business with KCHA. The following are examples of prohibited conduct. This list is not exclusive; employees should see KCHA's Personnel Policies and Procedures for more details and vendors/contractors should contact the Human Resources Department for more details:

- Unwelcome conduct based on protected status when sufficiently severe or pervasive to create a hostile work environment; or a supervisor's improper conduct results in a tangible change in an employee's status or benefits (demotion, termination, etc.).
- Unwelcome sexual advances, requests for sexual favors and other verbal or physical conduct of a sexual nature when (1) submission to such conduct is made an implicit or explicit condition of employment; (2) submission to or rejection of such conduct affects employment opportunities or decisions; or (3) such conduct interferes with an employee's work or creates an intimidating, hostile or offensive work environment.
- Sexually suggestive or racially derogatory words, pictures, videos, cartoons, emails, etc.
- Leering, staring in a sexually suggestive manner or making offensive remarks about looks, clothing, or body.
- Touching in a way that may make an individual feel uncomfortable, such as patting, pinching or intentional brushing against another's body.
- Gestures, pictures or drawings which would offend a particular racial or ethnic group or other protected class.
- Comments about an individual's skin color, accent, or other racial/ethnic characteristics.
- Disparaging remarks or stereotypes about an individual's gender, race, birthplace, ethnicity or ancestry.
- Negative comments about an individual's religious beliefs (or lack of religious beliefs).
- Negative comments regarding an individual's age if age 40 and over.
- Derogatory or intimidating references to an employee's mental or physical impairment.

Anyone who has been harassed and/or discriminated against is expected to promptly report the alleged incident(s) to the Supervisor, Department Director, Director of Human Resources, Deputy Executive Director/Chief Administrative Officer or the Executive Director. KCHA will protect the confidentiality of such complaints to the extent possible. Complaints will be promptly, thoroughly and impartially investigated and KCHA will take immediate and appropriate corrective action when it determines that harassment has occurred. Individuals who make complaints or provide information related to complaints will be protected from retaliation.

The Bidder hereby certifies that the information contained above is understood and agreed upon.

Bidder's Company Name:			
Print Name of Authorized Official	Title		
Signature	Date		
Bidding Contractor's Company Name:	Initials:		
Harassment and Discrimination Page 1 o Return Form – B.10	KCHA / 10-20-22		



WMBE SURVEY – RETURN EACH FORM SINGLE SIDED

PLEASE COMPLETE THIS SURVEY AND RETURN WITH YOUR BID / PROPOSAL DOCUMENTS. NOT SUBMITTING THIS SURVEY WILL NOT DISQUALIFY YOUR BID/PROPOSAL. THIS IS FOR INFORMATIONAL PURPOSES ONLY.

Bidding Company Name:				
Address:				
City / State / Zip:				
Type of Business:		_Incorporated – Federal 1	ID#:	
		_Sole Proprietorship – SS	S#:	
		Other – Describe:		
WMBE:		_Yes	No	
Describe:	Disadvantage Owned (Disabled – DBE)			
		_Women Owned (WBE)		
	Minority Owned (MBE or MWBE) (Check Applicable)			
	1.	White American	4.	Hispanic American
	2.	Black American	5.	Asian – Pacific American
	3.	Native American	6.	Hasidic Jew
Registered WMBE:	Yes	No		_ Registration in Progress
Authorized Signer		Print Name and Title		Date
FOR KCHA USE ONLY: IF			THE CONTRA	CT, FORWARD THIS FORM
TO: Tim Baker – KCHA Senior Management Analyst Phone: 206-574-1111 Email: timb@kcha.org				

Bidding Contractor's Company Name: Initials:



CONTRACTOR'S SUPPLIED SCHEDULE – RETURN EACH FORM SINGLE SIDED

- A. Gantt-Chart Schedule: Submit to the Owner a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Final Master Project Schedule within fourteen (14) days of date after Letter of Award. Base schedule on the Preliminary Master Project Schedule and whatever updating and feedback was received since the start of Project. The Gantt-Chart Final Master Project Schedule can be either in MS Project or equivalent format.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1. For construction activities that require three (3) months or longer to complete, indicate an estimated completion percentage in ten (10%) percent increments within time bar.
- C. Contractor's Final Master Project Schedule Updating: At two (2) week intervals, update schedule to reflect actual construction progress and activities. Issue schedule three (3) days before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate Actual Completion percentage for each activity.

CONTRACTOR TO INSERT PRELIMINARY MASTER PROJECT SCHEDULE HERE MUST BE IN MICROSOFT PROJECT, PRIMAVERA or SIMILAR

Bidding Contractor's Company Name:

Initials:



work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (b)(1) of this section.

- (3) *Withholding for unpaid wages and liquidated damages.* The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (b)(2) of this section.
- (4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (b)(1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (b)(1) through (4) of this section.
- (c) In addition to the clauses contained in paragraph (b), in any contract subject only to the Contract Work Hours and Safety Standards Act and not to any of the other statutes cited in § 5.1, the Agency Head shall cause or require the contracting officer to insert a clause requiring that the contractor or subcontractor shall maintain payrolls and basic payroll records during the course of the work and shall preserve them for a period of three years from the completion of the contract for all laborers and mechanics, including guards and watchmen, working on the contract. Such records shall contain the name and address of each such employee, social security number, correct classifications, hourly rates of wages paid, daily and weekly number of hours worked, deductions made, and actual wages paid. Further, the Agency Head shall cause or require the contracting officer to insert in any such contract a clause providing that the records to be maintained under this paragraph shall be made available by the contractor or subcontractor for inspection, copying, or transcription by authorized representatives of the (write the name of agency) and the Department of Labor, and the contractor or subcontractor will permit such representatives to interview employees during working hours on the job.



BB - SECTION

NO PARTICIPATION for Bid Package

BB.1 No Participation Form



PARTICIPATION RESPONSE FORM

IF YOU CHOOSE NOT TO BID ON THIS PROJECT **RETURN ONLY THIS FORM PRIOR TO THE BID DUE DATE.** (NOT RETURNING THIS DOCUMENT COULD RESULT IN YOUR NAME BEING REMOVED FROM FURTHER KCHA SOLICITATIONS.)

BID DUE DATE:	<u>April 5, 2023</u>	
PROJECT NAME:	Northwood Square Site and Storage	
RETURN FORM TO:	<u>Amyk@kcha.org</u>	
**NOTE: Contractors have the option to mail in the No Participation Response Form, but this form must be received by the deadline of 1:00PM. KCHA does not recommend mailing in this form due to possible complications or difficulties that may arise with the mail delivery.		
If using the mail please return the form to:	KING COUNTY HOUSING AUTHORITY ATTN: Amy Kurtz, Project Manager 700 Andover Park West, Suite C Tukwila, WA 98188	
1. My Company is NOT BIDDING on this	Contract because: (check all response(s) that apply:	
Does not perform the requested type	be of work	
Has other work which would interfere with the proposed work schedule		
☐ Job is too big		

Job is too small

Can't meet the bonding and/or insurance requirements

The documents were not received in time to prepare a bid

The specifications were not clear. Please describe:

Other:

2. I would have Bid on this Contract if:

COMPANY NAME:		
ADDRESS:		
CITY-STATE-ZIP		
SIGNATURE:	PRINCIPAL OR OFFICER	 DATE



C - SECTION

CONTRACT DOCUMENTS for Bid Package

- C.1 Construction Contract and General Conditions Sample Template
- C.2 Performance and Payment Bond with Directions (for projects \$35,000 & over)
- C.3 Certificate as to Corporate Principal (If Performance & Payment Bonds are required)
- C.4 Instructions to Bidders for Insurance Requirements
- C.5 Site Specific Safety Plan List of Plan Requirements
- C.6 Subcontractor Verification
- C.7 Certification of Payments to Influence Federal Transactions (for all subcontracts \$100,000 & over)
- C.8 Disclosure of Lobbying Activities (for all subcontracts \$100,000 & over)
- C.9 Certification of Compliance with Washington State Wage Payment Statutes
- C.10 Vendor Set Up Form
- C.11 Final Affidavits of Amounts Paid Contractors
- C.12 Section 3 Individual Certification Form and FAQ's
- C.13 Section 3 Labor Hours Benchmark Status Report Sample Template

If selected, the documents that are numbered 2 through 9 will need to be submitted prior to the "Notice of Award" along with a copy of the completed Statement of Intent to Pay Prevailing Wages that you have filed with the Washington State Department of Labor and Industries.



CONSTRUCTION CONTRACT / GENERAL CONDITION SAMPLES

PLEASE SEE ATTACHED AIA DOCUMENTS

RAFT AIA Document A101[™] - 2017

Standard Form of Agreement Between Owner and Contractor

where the basis of payment is a Stipulated Sum

AGREEMENT made as of the «» day of «» in the year «» (In words, indicate day, month and year.)

CONTRACT NUMBER: «»

BETWEEN the Owner: (Name, legal status, address and other information)

KING COUNTY HOUSING AUTHORITY 600 Andover Park West Tukwila, Washington 98188

and the Contractor: (Name, legal status, address and other information)

NAME OF CONTRACTOR Street Address City, State Zip

for the following Project: (Name, location and detailed description)

NAME OF SITE

Street Address City, State Zip **PROJECT NAME:**

City, State Zip

The Architect and/or The Engineer: (Name, legal status, address and other information)

NAME OF ARCHITECT OR ENGINEER Street Address

The Owner and Contractor agree as follows.

In consideration of the mutual covenants and agreements herein contained, the Contractor agrees to furnish all labor, material, tools, equipment, and other items necessary to perform and complete all work described in the contract documents. This agreement includes Owner Directed Work Items. The Owner Directed Work Items may or may not be completed under this agreement. If the Owner elects to exclude any or all Owner Directed Work Items, an adjustment shall be made to this Agreement.

ADDITIONS AND DELETIONS:

The author of this document has added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

AIA Document A201[™]-2017, General Conditions of the Contract for Construction, is adopted in this document by reference. Do not use with other general conditions unless this document is modified.



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TABLE OF ARTICLES

- 1 THE CONTRACT DOCUMENTS
- 2 THE WORK OF THIS CONTRACT
- 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION
- 4 CONTRACT SUM
- 5 PAYMENTS
- 6 DISPUTE RESOLUTION
- 7 TERMINATION OR SUSPENSION
- 8 MISCELLANEOUS PROVISIONS
- 9 ENUMERATION OF CONTRACT DOCUMENTS

ARTICLE 1 THE CONTRACT DOCUMENTS

The Contract Documents consist of this Agreement, Conditions of the Contract (General, Supplementary, and other Conditions), Drawings, Specifications, Addenda issued prior to execution of this Agreement, other documents listed in this Agreement, and Modifications issued after execution of this Agreement, all of which form the Contract, and are as fully a part of the Contract as if attached to this Agreement or repeated herein. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. An enumeration of the Contract Documents, other than a Modification, appears in Article 9.

ARTICLE 2 THE WORK OF THIS CONTRACT

The Contractor shall fully execute the Work described in the Contract Documents, except as specifically indicated in the Contract Documents to be the responsibility of others. The Contractor shall comply with the Detailed Summary of the Scope of Work per Exhibit A.

ARTICLE 3 DATE OF COMMENCEMENT AND SUBSTANTIAL COMPLETION

§ 3.1 The date of commencement of the Work shall be: *(Check one of the following boxes.)*

- [« »] The date of this Agreement.
- [X] A date set forth in a notice to proceed issued by the Owner.
- [« »] Established as follows: (Insert a date or a means to determine the date of commencement of the Work.)
 - « »

§ 3.2 The Contract Time shall be measured from the date of commencement of the Work, as indicated in the Notice to Proceed.

§ 3.3 Substantial Completion

§ 3.3.1 Subject to adjustments of the Contract Time as provided in the Contract Documents, the Contractor shall achieve Substantial Completion of the entire Work no later than the date stipulated in the **Notice to Proceed**.

Portion of Work	Dates
Contract – Start Date	Month, Day, Year
Construction Period	Month, Day, Year to Month, Day, Year
Substantial Completion Date	Month, Day, Year
Physical Completion Date	Month, Day, Year (Liquidated Damages Start)
Contract – Final Completion Date	Month, Day, Year

§ 3.3.3 If the Contractor fails to achieve Substantial Completion as provided in this Section 3.3, liquidated damages, if any, shall be assessed as set forth in Section 4.5.

CONTRACT SUM ARTICLE 4

§ 4.1 The Owner shall pay the Contractor the Contract Sum in current funds for the Contractor's performance of the Contract. The Contract Sum shall be «» (\$ «»), subject to additions and deductions as provided in the Contract Documents.

§ 4.2 Alternates

§ 4.2.1 Alternates, if any, included in the Contract Sum:

Alternate Number and Description

§ 4.2.2 Subject to the conditions noted below, the following alternates may be accepted by the Owner following execution of this Agreement. Upon acceptance, the Owner shall issue a Modification to this Agreement. (Insert below each alternate and the conditions that must be met for the Owner to accept the alternate.)

Item	Price	Conditions for Acceptance
NA		
§ 4.3 Allowances, if any, included in the Contract Sum: <i>(Identify each allowance.)</i>		

Price

Price

Λ

Allowance Description

§ 4.4 Unit prices, if any:

Owner's Contingency

(Identify the item and state the unit price and quantity limitations, if any, to which the unit price will be applicable.) Unit prices will be used for unforeseen conditions where small quantities are needed. An unforeseen condition requiring large quantities resulting in a substantial change in the scope of work will not be considered applicable for unit pricing. Large deviations in the Scope of Work will be evaluated and addressed through a change order process as stipulated in the Contract Documents.

Unit Item Description	Price per Unit (\$0.00)

§ 4.5 Liquidated damages, if any:

(Insert terms and conditions for liquidated damages, if any.)

Timely performance and completion of the Work is essential to the Owner and Time limits stated in the Agreement are of the essence. Owner will incur serious and substantial damages if Substantial Completion of the Work or Contract Completion of the entire project does not occur in the time limits defined in the Agreement. Liquidated Damages will not be assessed as a penalty, but as Liquidated Damages for breach of contract. The amount is fixed and agreed upon by the Contractor and Owner due to the extreme difficulty and impracticability of fixing and ascertaining the actual damages the Owner would sustain. This amount is construed as an actual amount of damages to the Owner and may be retained by the Owner and deducted from any payment to the Contractor for obligations in the Agreement. If different and separate completion dates are stated in the Agreement for separate parts or stages of the Work, the amount of Liquidated Damages shall apply and may be assessed on those parts or those stages of the Work which are delayed. The Owner therefore may impose and assess Liquidated Damages in the following amount per calendar day:

 $\{426/612.052/02533546-2\}$

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«»	«»
\ //	~//

§ 4.6 Other:

(Insert provisions for bonus or other incentives, if any, that might result in a change to the Contract Sum.)

NA

ARTICLE 5 PAYMENTS

§ 5.1 Progress Payments

§ 5.1.1 Based upon Applications for Payment submitted to the Owner by the Contractor, the Owner shall make progress payments on account of the Contract Sum to the Contractor as provided below and elsewhere in the Contract Documents.

§ 5.1.2 The period covered by each Application for Payment shall be one calendar month ending on the last day of the month, or as follows:

NA

§ 5.1.3 Provided that an Application for Payment is received by the Owner not later than the 25th day of a month, the Owner shall make payment of the amount certified to the Contractor not later than the 25th day of the following month.

(Federal, state or local laws may require payment within a certain period of time.)

§ 5.1.3.1 Applications for Payment may be delayed by Owner should any criteria listed in A201TM-2017 General Conditions Section 9.5.1 be evident or if the As-Built Documents have not been updated per Division 01 10 10 Scope of Work Section 2.0.B.6.

§ 5.1.4 Each Application for Payment shall be based on the most recent schedule of values submitted by the Contractor in accordance with the Contract Documents. The schedule of values shall allocate the entire Contract Sum among the various portions of the Work. The schedule of values shall be prepared in such form, and supported by such data to substantiate its accuracy. This schedule, unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's Applications for Payment.

§ 5.1.5 Applications for Payment shall show the percentage of completion of each portion of the Work as of the end of the period covered by the Application for Payment.

§ 5.1.6 In accordance with AIA Document A201TM–2017, General Conditions of the Contract for Construction, and subject to other provisions of the Contract Documents, the amount of each progress payment shall be computed as follows:

§ 5.1.6.1 The amount of each progress payment shall first include:

- .1 That portion of the Contract Sum properly allocable to completed Work;
 - .2 That portion of the Contract Sum properly allocable to materials and equipment delivered and suitably stored at the site for subsequent incorporation in the completed construction, or, if approved in advance by the Owner, suitably stored off the site at a location agreed upon in writing.; and

§ 5.1.6.2 The amount of each progress payment shall then be reduced by:

- .1 The aggregate of any amounts previously paid by the Owner;
- **.2** The amount, if any, for Work that remains uncorrected and for which the Owner has previously withheld an Application for Payment as provided in Article 9 of AIA Document A201–2017;
- **.3** Any amount for which the Contractor does not intend to pay a Subcontractor or material supplier, unless the Work has been performed by others the Contractor intends to pay;
- .4 For Work performed or defects discovered since the last payment application, any amount for which the Owner may withhold payment, or nullify an Application of Payment in whole or in part, as provided in Article 9 of AIA Document A201–2017; and
- .5 Retainage withheld pursuant to Section 5.1.7.

§ 5.1.6.3 The General Contractor Certification upon the Application for Payment form, per Exhibit B will accompany each Application for Payment. By submitting an Application for Payment, the Contractor certifies, agrees and warrants to the Owner as follows:

.1 The Contractor has made full payment to all laborers, subcontractors and suppliers of material and equipment whose charges were included in any prior Application for Payment, subject only to (a) retainage at the contract rate, and (b) the matters set forth below or on an attachment hereto.

.2 The Contractor knows of no one making a claim for payment other than those included in the current Application for Payment, who will be paid when the current Application for Payment is paid by the Owner, except as noted below or on an attachment hereto.

.3 In consideration of payments made by the Owner, the Contractor hereby waives and releases any and all claims and demands against Owner and the Project for all periods up to and including the period covered by this Application for Payment, subject only to (a) receipt of payment of the current Application, (b) applicable retainage, and (c) the matters set forth below or on an attachment hereto.

§ 5.1.7 Retainage

§ 5.1.7.1 For each progress payment made prior to Substantial Completion of the Work, the Owner may withhold the following amount, as retainage, from the payment otherwise due:

(Insert a percentage or amount to be withheld as retainage from each Application for Payment. The amount of retainage may be limited by governing law.)

«Five Percent » « 5% »

§ 5.1.7.1.1 The following items are not subject to retainage: (Insert any items not subject to the withholding of retainage, such as general conditions, insurance, etc.)

« NA »

§ 5.1.7.2 Reduction or limitation of retainage, if any, shall be as follows:

(If the retainage established in Section 5.1.7.1 is to be modified prior to Substantial Completion of the entire Work, including modifications for Substantial Completion of portions of the Work as provided in Section 3.3.2, insert provisions for such modifications.)

$\ll NA \gg$

§ 5.1.7.3 Retainage shall be held at the rate stated in § 5.1.7.1 for the duration of the project. There shall be no reduction or limitation of retainage. There shall also be no early release of retainage by the Owner to the Contractor. The Owner must obtain all releases in relation to Contractor Compliance from the Washington State Department of Revenue, the Washington State Department of Labor and Industries, and the Washington State Department of Employment Security prior to any release of retention by the Owner to the Contractor.

§ 5.1.8 If final completion of the Work is materially delayed through no fault of the Contractor, the Owner shall pay the Contractor any additional amounts in accordance with Article 9 of AIA Document A201–2017.

§ 5.1.9 Except with the Owner's prior approval, the Contractor shall not make advance payments to suppliers for materials or equipment which have not been delivered and stored at the site.

§ 5.2 Final Payment

§ 5.2.1 Final payment, constituting the entire unpaid balance of the Contract Sum, shall be made by the Owner to the Contractor when

- .1 the Contractor has fully performed the Contract except for the Contractor's responsibility to correct Work as provided in Article 12 of AIA Document A201–2017, and to satisfy other requirements, if any, which extend beyond final payment; and
- .2 a final Application for Payment has been approved by the Owner;
- .3 verification of final Affidavits of Wages Paid (L&I) is provided by the Contractor to the Owner;
- .4 final Review and Approval of all Certified Payroll Documents for all Prevailing Wages.

§ 5.2.2 The Owner's final payment to the Contractor shall be made no later than 30 days after the Owner's approval of the Final Application for Payment,

ARTICLE 6 DISPUTE RESOLUTION

§ 6.1 Any claim between the Owner and Contractor shall be resolved in accordance with the provisions set forth in Article 15 of AIA Document A201–2017.

ARTICLE 7 TERMINATION OR SUSPENSION

§ 7.1 The Contract may be terminated by the Owner or the Contractor as provided in Article 14 of AIA Document A201–2017.

§ 7.2 The Work may be suspended by the Owner as provided in Article 14 of AIA Document A201–2017.

ARTICLE 8 MISCELLANEOUS PROVISIONS

§ 8.1 Where reference is made in this Agreement to a provision of AIA Document A201–2017 or another Contract Document, the reference refers to that provision as amended or supplemented by other provisions of the Contract Documents.

§ 8.2 The Owner's representative: (*Name, address, email address, and other information*)

Nikki Parrott, Director of Capital Construction & Weatherization

«», Project Manager «», Construction Coordinator «», Project Engineer

§ 8.3 The Contractor's representative:

(Name, address, email address, and other information)

«», President

§ 8.4 Neither the Owner's nor the Contractor's representative shall be changed without ten days' prior notice to the other party.

§ 8.5 Insurance and Bonds

§ 8.5.1 The Contractor shall purchase and maintain insurance as set forth in AIA Document A101TM-2017, Standard Form of Agreement Between Owner and Contractor where the basis of payment is a Stipulated Sum.

Limit of liability or

Type of insurance or bond

		bond amount (\$0.00)
Certificate of Liability Insurance Requirements:	Limit	(Exhibit – C)
	Coverage	(Exhibit – C)
Builders Risk Insurance:	Completed Value of Project	(Exhibit – C)
Performance and Payment Bond:	Gross Contract Amount	100%

§ 8.6 Other provisions:

§ 8.6.1 Section 3: Instruction, Requirements and Income Guidelines

§ 8.6.1.1 The Contractor shall comply with all requirements of the Section 3 Program for Economic Opportunities providing to the greatest extent possible, job training, employment and contract opportunities for low and very low income residents including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and Youthbuild participants, as defined at 24 CFR Part 75 per **Exhibit D.1-D.3** and as designated in AIA A201-2017, Section 18 of the General Conditions.

§ 8.6.2 Davis-Bacon / HUD Non-Routine Maintenance / State Prevailing Wage Certified Payroll

- § 8.6.2.1 The Contractor shall comply with requirements and regulations of the Davis-Bacon Act per E.0 & E.1.
 - .1 Payment of Wages to Workers shall be weekly.

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- .2 Certified Payroll Reports recording wages paid to each worker will be submitted to the Owner weekly.
- .3 Failure to submit weekly Certified Payroll Reports or errors in payroll reports for the Contractor and any and all Subcontractors, and any Lower Tier Subcontractors will be cause for the Owner to suspend or delay Contract Progress Payments.
- .4 The Owner shall withhold progress payments until all issues regarding full compliance with the submission of Certified Payroll Reports are resolved to the complete and full satisfaction of the Owner.
- .5 The Contractor is required and shall perform a complete review of all Certified Payroll Reports including those of the Contractor, and all Subcontractors and any and all Lower Tier Subcontractors prior to the submission of the reports by the Contractor to the Owner.
- .6 The Wage Decision for this project is: (Check one of the following boxes.) [«»] Davis-Bacon Construction Type «» Decision No. «» Modification No. «», Date «»

[«»] HUD Non-Routine Maintenance Date «»

[«»] WA State Prevailing Effective Date «» County «»

§ 8.6.3 Prevailing Wage Exemption

- § 8.6.3.1 For all contracts with a Bid Date of May 15, 2011 or later:
 - .1 When a Contractor claims an exemption from State Prevailing Wage Requirements on HUD Projects, the Contractor and all Subcontractors and all tiers must file an Intent and Affidavit with the Washington State Department of Labor and Industries for that project.
 - .2 The Statement of Intent must also include an Exemption Claim stating that the project is exempt from the payment of State Prevailing Wage Rates based on the Housing Act of 1937 and 24CFR 965.101 and further stating that all workers will be paid in accordance with the requirements of the Davis-Bacon Wage Requirements, per Exhibit E.2.
 - .3 Pursuant to RCW 39.12.040, the Owner will not make any payments to a Contractor who has not submitted an Intent Form that has been approved by the Washington State Department of Labor and Industries Industrial Statistician, or release funds retained until the Contractor and all subcontractors have submitted Affidavit forms that have been certified by the Industrial Statistician.

ARTICLE 9 ENUMERATION OF CONTRACT DOCUMENTS

§ 9.1 This Agreement is comprised of the following documents:

- .1 AIA Document A101TM–2017, Standard Form of Agreement Between Owner and Contractor
- .2 AIA Document A201TM–2017, General Conditions of the Contract for Construction

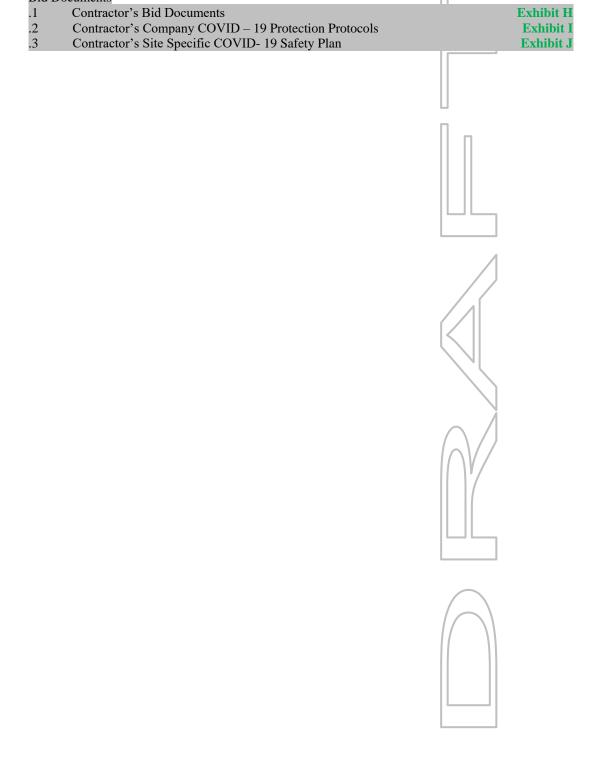
.3	Drawings Number	Title	Date
	Refer to Exhibit F	Drawings Table of Contents	
.4	Specifications		
	Section	Title	Date Pages
	Refer to Exhibit G	Specifications Table of Contents	
.5	Addenda, if any:		
	Number	Date	Pages

Portions of Addenda relating to bidding or proposal requirements are not part of the Contract Documents unless the bidding or proposal requirements are also enumerated in this Article 9.



.6 Other documents, if any, listed below:

(List here any additional documents that are intended to form part of the Contract Documents. AIA Document A201TM_2017 provides that the advertisement or invitation to bid, Instructions to Bidders, sample forms, the Contractor's bid or proposal, portions of Addenda relating to bidding or proposal requirements, and other information furnished by the Owner in anticipation of receiving bids or proposals, are not part of the Contract Documents unless enumerated in this Agreement. Any such documents should be listed here only if intended to be part of the Contract Documents.) Bid Documents



This Agreement entered into as of the day and year first written above.

KING COUNTY HOUSING AUTHORITY

XXX CONSTRUCTION COMPANY

OWNER (Signa	ature)	CONTRACTOR (Signature)	
Name (Print)		Name (Print)	
Title (Print)		Title (Print)	
		Contractor's License No.: «»	
EXHIBIT OVER	RVIEW:		
DESCRIPTION		CROSS REFERENCE	
Exhibit – A Exhibit – B Exhibit – C Exhibit – D.1 Exhibit – D.2 Exhibit – D.3 Exhibit – E.0 Exhibit – E.1 Exhibit – E.2 Exhibit – F Exhibit – G Exhibit – H Exhibit – I Exhibit – J	Detailed Summary of Scope of Work Application for Payment Insurance Requirements Section 3 Documents Section 3 Documents Certified Payroll Certified Payroll Prevailing Wage Exemption Drawings Specifications Contractor's Bid Documents Contractor's Company COVID-19 Prote Contractor's Site Specific COVID-19 Sa		Article 2 5.1.6.3 8.5.1 8.5.1 8.6.1 8.6.1 8.6.2 8.6.2 8.6.2 8.6.3.1 9.1.3 9.1.4 9.1.6.1 9.1.6.2 9.1.6.3

DRAFT AIA Document A201[™] - 2017

General Conditions of the Contract for Construction

CONTRACT NUMBER:

for the following PROJECT:

(Name and location or address)

NAME OF SITE

Street Address City, State Zip **PROJECT NAME:**

THE OWNER: (*Name, legal status and address*)

KING COUNTY HOUSING AUTHORITY 600 Andover Park West Tukwila, Washington 98188

THE CONTRACTOR: (Name, legal status and address)

CONTRACTOR'S NAME Address City, State Zip

THE ARCHITECT and/or THE ENGINEER: (*Name, legal status and address*)

ARCHITECT/ENGINEER NAME Address City, State Zip

ADDITIONS AND DELETIONS: The author of this document has added information

nas added information needed for its completion. The author may also have revised the text of the original AIA standard form. An Additions and Deletions Report that notes added information as well as revisions to the standard form text is available from the author and should be reviewed.

This document has important legal consequences. Consultation with an attorney is encouraged with respect to its completion or modification.

For guidance in modifying this document to include supplementary conditions, see AIA Document A503™, Guide for Supplementary Conditions.





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ARTICLE 1 GENERAL PROVISIONS

§ 1.1 Basic Definitions

§ 1.1.1 The Contract Documents

The Contract Documents are enumerated in the Agreement between the Owner and Contractor (hereinafter the Agreement) and consist of the Agreement, Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to execution of the Contract, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Owner. Unless specifically enumerated in the Agreement, the Contract Documents do not include the advertisement or invitation to bid, Instructions to Bidders, sample forms, other information furnished by the Owner in anticipation of receiving bids or proposals, the Contractor's bid or proposal, or portions of Addenda relating to bidding or proposal requirements.

§ 1.1.2 The Contract

The Contract Documents form the Contract for Construction. The Contract represents the entire and integrated agreement between the parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract may be amended or modified only by a Modification. The Contract Documents shall not be construed to create a contractual relationship of any kind (1) between the Contractor and the Architect or the Architect's consultants, (2) between the Owner and a Subcontractor or a Sub-subcontractor, (3) between the Owner and the Architect or the Architect or the Architect's consultants, or (4) between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

§ 1.1.3 The Work

The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment, and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the Project.

§ 1.1.4 The Project

The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner and by Separate Contractors.

§ 1.1.5 The Drawings

The Drawings are the graphic and pictorial portions of the Contract Documents showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules, and diagrams.

§ 1.1.6 The Specifications

The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, systems, standards and workmanship for the Work, and performance of related services.

§ 1.1.7 Instruments of Service

Instruments of Service are representations, in any medium of expression now known or later developed, of the tangible and intangible creative work performed by the Architect and the Architect's consultants under their respective professional services agreements. Instruments of Service may include, without limitation, studies, surveys, models, sketches, drawings, specifications, and other similar materials.

§ 1.2 Correlation and Intent of the Contract Documents

§ 1.2.1 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required only to the extent consistent with the Contract Documents and reasonably inferable from them as being necessary to produce the indicated results.

§ 1.2.1.1 The invalidity of any provision of the Contract Documents shall not invalidate the Contract or its remaining provisions. If it is determined that any provision of the Contract Documents violates any law, or is otherwise invalid or unenforceable, then that provision shall be revised to the extent necessary to make that provision legal and enforceable. In such case the Contract Documents shall be construed, to the fullest extent permitted by law, to give effect to the parties' intentions and purposes in executing the Contract.

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§ 1.2.2 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade.

§ 1.2.3 Unless otherwise stated in the Contract Documents, words that have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

§ 1.3 Capitalization

Terms capitalized in these General Conditions include those that are (1) specifically defined, (2) the titles of numbered articles, or (3) the titles of other documents published by the American Institute of Architects.

§ 1.4 Interpretation

In the interest of brevity the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

§ 1.5 Ownership and Use of Drawings, Specifications, and Other Instruments of Service

§ 1.5.1 The Architect and the Architect's consultants shall be deemed the authors and owners of their respective Instruments of Service, including the Drawings and Specifications, and retain all common law, statutory, and other reserved rights in their Instruments of Service, including copyrights. The Contractor, Subcontractors, Subsubcontractors, and suppliers shall not own or claim a copyright in the Instruments of Service. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with the Project is not to be construed as publication in derogation of the Architect's or Architect's consultants' reserved rights.

§ 1.5.2 The Contractor, Subcontractors, Sub-subcontractors, and suppliers are authorized to use and reproduce the Instruments of Service provided to them, solely and exclusively for execution of the Work. All copies made under this authorization shall bear the copyright notice, if any, shown on the Instruments of Service. The Contractor, Subcontractors, Sub-subcontractors, and suppliers may not use the Instruments of Service on other projects or for additions to the Project outside the scope of the Work without the specific written consent of the Owner.

§ 1.6 Notice

§ 1.6.1 Except as otherwise provided in Section 1.6.2, where the Contract Documents require one party to notify or give notice to the other party, such notice shall be provided in writing to the designated representative of the party to whom the notice is addressed and shall be deemed to have been duly served if delivered in person, by mail, by courier, or by electronic transmission.

§ 1.6.2 Notice of Claims as provided in Section 15.1.3 shall be provided in writing and shall be deemed to have been duly served only if delivered to the designated representative of the party to whom the notice is addressed by certified or registered mail, or by courier providing proof of delivery.

§ 1.7 Digital Data Use and Transmission

If the parties intend to transmit Instruments of Service or any other information or documentation in digital form, they shall endeavor to establish necessary protocols governing such transmissions, unless otherwise already provided in the Agreement or the Contract Documents.

ARTICLE 2 OWNER

§ 2.1 General

§ 2.1.1 The Owner is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Owner shall designate in writing a representative who shall have express authority to bind the Owner with respect to all matters requiring the Owner's approval or authorization. Except as otherwise provided in Section 4.2.1, the Architect does not have such authority. The term "Owner" means the Owner or the Owner's authorized representative.

§ 2.1.2 The Owner shall furnish to the Contractor, within fifteen days after receipt of a written request, information necessary and relevant for the Contractor to evaluate, give notice of, or enforce mechanic's lien rights. Such information shall include a correct statement of the record legal title to the property on which the Project is located, usually referred to as the site, and the Owner's interest therein.

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§ 2.2 Evidence of the Owner's Financial Arrangements

§ 2.2.1 For the purposes of this Agreement the Owner has provided sufficient and adequate funding for this project. The Contractor may only request such evidence if (1) the Owner fails to make payments to the Contractor as the Contract Documents require; (2) a change in the Work materially changes the Contract Sum; or (3) the Contractor identifies in writing a reasonable concern regarding the Owner's ability to make payment when due. The Owner shall furnish such evidence as a condition precedent to commencement or continuation of the Work or the portion of the Work affected by a material change.

§ 2.3 Information and Services Required of the Owner

§ 2.3.1 Except for permits and fees that are the responsibility of the Contractor under the Contract Documents, including those required under Section 3.7.1, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.

§ 2.3.2 The Owner may retain an architect lawfully licensed to practice architecture, or an entity lawfully practicing architecture, in the jurisdiction where the Project is located. That person or entity is identified as the Architect in the Agreement and is referred to throughout the Contract Documents as if singular in number.

§ 2.3.5 The Owner shall furnish surveys describing physical characteristics, legal limitations and utility locations for the site of the Project, and a legal description of the site. The Contractor shall be entitled to rely on the accuracy of information furnished by the Owner but shall exercise proper precautions relating to the safe performance of the Work.

§ 2.3.6 The Owner shall furnish information or services required of the Owner by the Contract Documents with reasonable promptness. The Owner shall also furnish any other information or services under the Owner's control and relevant to the Contractor's performance of the Work with reasonable promptness after receiving the Contractor's written request for such information or services.

§ 2.3.6 Unless otherwise provided in the Contract Documents, the Owner shall furnish to the Contractor one copy of the Contract Documents for purposes of making reproductions pursuant to Section 1.5.2.

§ 2.4 Owner's Right to Stop the Work

If the Contractor fails to correct Work that is not in accordance with the requirements of the Contract Documents as required by Section 12.2 or repeatedly fails to carry out Work in accordance with the Contract Documents, the Owner may issue a written order to the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Owner to stop the Work shall not give rise to a duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity, except to the extent required by Section 6.1.3.

§ 2.5 Owner's Right to Carry Out the Work

If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a ten-day period after receipt of notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may, without prejudice to other remedies the Owner may have, correct such default or neglect. In such case an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor for the reasonable cost of correcting such deficiencies, including Owner's expenses and compensation for the additional professional design services made necessary by such default, neglect, or failure. If current and future payments are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. If the Contractor disagrees with the actions of the Owner or the professional design services, or the amounts claimed as costs to the Owner, the Contractor may file a Claim pursuant to Article 15.

ARTICLE 3 CONTRACTOR

§ 3.1 General

§ 3.1.1 The Contractor is the person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The Contractor shall be lawfully licensed, if required in the jurisdiction where the Project is located. The Contractor shall designate in writing a representative who shall have express authority to bind the Contractor with respect to all matters under this Contract. The term "Contractor" means the Contractor or the Contractor's authorized representative.

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§ 3.1.2 The Contractor shall perform the Work in accordance with the Contract Documents.

§ 3.1.3 The Contractor shall not be relieved of its obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Architect in the Owners's administration of the Contract, or by tests, inspections or approvals required or performed by persons or entities other than the Contractor.

§ 3.1.4 Progress Meetings. The Contractor shall schedule and conduct meetings with the Owner and as determined by the Owner with the Architect also present, to discuss such matters as procedures, progress, coordination, and the Final Project Schedules. The Contractor shall prepare, record, and promptly distribute minutes of each progress meeting to each attendee and identified stakeholders. The Contractor shall also provide a short-term look ahead schedule for presentation and review at each progress meeting. The short-term schedule shall be in sufficient detail to allow the Contractor and Owner to make any necessary schedule modifications to maintain the progress of the Work and for adherence to the time frames stipulated in the Agreement. The following shall also be included in the progress meeting agenda:

- .1 Coordination of architectural, structural, mechanical, electrical, civil work or any other item associated with the Work.
- .2 Measures to mitigate adverse effects of construction on the residents of the development during construction.
- .3 Resolving issues with governing agencies.
- .4 Status of submittals, RFI's, COR's and COR's.
- .5 Site safety and associated issues.
- .6 Segregated and comingled material recycling reports.
- .7 Section 3 compliance and status.

§ 3.2 Review of Contract Documents and Field Conditions by Contractor

§ 3.2.1 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become generally familiar with local conditions under which the Work is to be performed, and correlated personal observations with requirements of the Contract Documents.

§ 3.2.2 Because the Contract Documents are complementary, the Contractor shall, before starting each portion of the Work, carefully study and compare the various Contract Documents relative to that portion of the Work, as well as the information furnished by the Owner pursuant to Section 2.3.4, shall take field measurements of any existing conditions related to that portion of the Work, and shall observe any conditions at the site affecting it. These obligations are for the purpose of facilitating coordination and construction by the Contractor and are not for the purpose of discovering errors, omissions, or inconsistencies in the Contract Documents; however, the Contractor shall promptly report to the Owner any errors, inconsistencies or omissions discovered by or made known to the Contractor as a request for information in such form as the Owner may require. It is recognized that the Contractor's review is made in the Contractor's capacity as a contractor and not as a licensed design professional, unless otherwise specifically provided in the Contract Documents.

.1 If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the drawings.

§ 3.2.3 The Contractor is not required to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, but the Contractor shall promptly report to the Owner any nonconformity discovered by or made known to the Contractor as a request for information in such form as the Owner may require.

§ 3.2.4 If the Contractor believes that additional cost or time is involved because of clarifications or instructions the Owner issues in response to the Contractor's notices or requests for information pursuant to Sections 3.2.2 or 3.2.3, the Contractor shall submit Claims as provided in Article 15. If the Contractor fails to perform the obligations of Sections 3.2.2 or 3.2.3, the Contractor shall pay such costs and damages to the Owner, subject to Section 15.1.7, as would have been avoided if the Contractor had performed such obligations. If the Contractor performs those obligations, the Contract Documents, for differences between field measurements or conditions and the Contract Documents, or for nonconformities of the Contract Documents to applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities.

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§ 3.3 Supervision and Construction Procedures

§ 3.3.1 The Contractor shall supervise and direct the Work, using the Contractor's best skill and attention. The Contractor shall be solely responsible for, and have control over, construction means, methods, techniques, sequences, and procedures, and for coordinating all portions of the Work under the Contract. If the Contract Documents give specific instructions concerning construction means, methods, techniques, sequences, or procedures, the Contractor shall evaluate the jobsite safety thereof and shall be solely responsible for the jobsite safety of such means, methods, techniques, sequences, or procedures. If the Contractor determines that such means, methods, techniques, sequences or procedures may not be safe, the Contractor shall give timely notice to the Owner, and shall propose alternative means, methods, techniques, sequences, or procedures. The Owner shall evaluate the proposed alternative solely for conformance with the design intent for the completed construction. Unless the Owner objects to the Contractor's proposed alternative, the Contractor shall perform the Work using its alternative means, methods, techniques, sequences or procedures and shall not proceed with that portion of the Work without further written instructions from the Owner. If the Contractor is then instructed to proceed with the required means, methods, techniques, sequences or procedures without acceptance of changes proposed by the Contractor, the Owner shall be solely responsible for any loss or damage arising solely from those Owner-required means, methods, techniques, sequences or procedures.

§ 3.3.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons or entities performing portions of the Work for, or on behalf of, the Contractor or any of its Subcontractors.

§ 3.3.3 The Contractor shall be responsible for inspection of portions of Work already performed to determine that such portions are in proper condition to receive subsequent Work.

§ 3.4 Labor and Materials

§ 3.4.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

§ 3.4.2 Except in the case of minor changes in the Work authorized by the Owner in accordance with Section 3.12.8, the Contractor may make substitutions only with the consent of the Owner, and in accordance with a Change Order or Construction Change Directive.

§ 3.4.3 The Contractor shall enforce strict discipline and good order among the Contractor's employees and other persons carrying out the Work. The Contractor shall not permit employment of unfit persons or persons not properly skilled in tasks assigned to them.

§ 3.5 Warranty

§ 3.5.1 The Contractor warrants to the Owner that materials and equipment furnished under the Contract will be of good quality, new and in conformance with the Contract Documents unless the Contract Documents require or permit otherwise. The Contractor further warrants that the Work will conform to the requirements of the Contract Documents and will be free from defects, except for those inherent in the quality of the Work the Contract Documents require or permit. Work, materials, or equipment not conforming to these requirements may be considered defective. The Contractor's warranty excludes remedy for damage or defect caused by abuse, alterations to the Work not executed by the Contractor, improper or insufficient maintenance, improper operation, or normal wear and tear and normal usage. If required by the Owner, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.

§ 3.5.2 All material, equipment, or other special warranties required by the Contract Documents shall be issued in the name of the Owner, or shall be transferable to the Owner, and shall commence in accordance with Section 9.8.4.

§ 3.6 Taxes

The Contractor shall pay sales, consumer, use and similar taxes for the Work provided by the Contractor that are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

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§ 3.7 Permits, Fees, Notices and Compliance with Laws

§ 3.7.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay permits other than those acquired and paid by the Owners.

§ 3.7.2 The Contractor shall comply with and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities applicable to performance of the Work.

§ 3.7.3 If the Contractoror performs Work knowing it to be contrary to applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of public authorities, the Contractor shall assume appropriate responsibility for such Work and shall bear the costs attributable to correction. The Contract shall provide the required tenant notices as directed by the Owner.

§ 3.7.4 Concealed or Unknown Conditions

If the Contractor encounters conditions at the site that are (1) subsurface or otherwise concealed physical conditions that differ materially from those indicated in the Contract Documents or (2) unknown physical conditions of an unusual nature that differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the character provided for in the Contract Documents, the Contractor shall promptly provide notice to the Owner before conditions are disturbed and in no event later than 14 days after first observance of the conditions. The Owner will promptly investigate such conditions and, if the Owner determines that they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend that an equitable adjustment be made in the Contract Sum or Contract Time, or both. If the Owner determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Owner shall promptly notify the Contractor in writing, stating the reasons.

§ 3.7.5 If, in the course of the Work, the Contractor encounters human remains or recognizes the existence of burial markers, archaeological sites or wetlands not indicated in the Contract Documents, the Contractor shall immediately suspend any operations that would affect them and shall notify the Owner. Upon receipt of such notice, the Owner shall promptly take any action necessary to obtain governmental authorization required to resume the operations. The Contractor shall continue to suspend such operations until otherwise instructed by the Owner but shall continue with all other operations that do not affect those remains or features. Requests for adjustments in the Contract Sum and Contract Time arising from the existence of such remains or features may be made as provided in Article 15.

§ 3.8 Allowances

§ 3.8.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct.

§ 3.8.2 Unless otherwise provided in the Contract Documents,

- .1 allowances shall cover the cost to the Contractor of materials and equipment delivered at the site and all required taxes, less applicable trade discounts;
- .2 Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit, and other expenses contemplated for stated allowance amounts shall be included in the shall be included in the allowances; and
- .3 whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by Change Order. The amount of the Change Order shall reflect (1) the difference between actual costs and the allowances under Section 3.8.2.1 and (2) changes in Contractor's costs under Section 3.8.2.2.

§ 3.9 Superintendent

§ 3.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor.

§ 3.9.2 The Contractor, as soon as practicable after award of the Contract, shall confirm for the Owner of the name and qualifications of the superintendent as identified in the Bid Documents. Within 14 days of receipt of the information, the Owner may notify the Contractor, stating whether the Owner (1) has reasonable objection to the proposed superintendent or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection.

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§ 3.9.3 The Contractor shall not employ a proposed superintendent to whom the Owner has made reasonable and timely objection. The Contractor shall not change the superintendent without the Owner's consent, which shall not unreasonably be withheld or delayed.

§ 3.9.4 The Contractor's Superintendent(s) shall be physically present at the jobsite from daily commencement of work to daily completion of work. The site shall be managed daily without interruption. Daily commencement and daily completion are defined as the actual hours of operation for the project.

§ 3.10 Contractor's Construction and Submittal Schedules

§ 3.10.1 The Contractor, promptly after being awarded the Contract, shall submit for the Owner's information a Contractor's construction schedule for the Work. The schedule shall contain detail appropriate for the Project, including (1) the date of commencement of the Work, interim schedule milestone dates, and the date of Substantial Completion; (2) an apportionment of the Work by construction activity; and (3) the time required for completion of each portion of the Work. The schedule shall provide for the orderly progression of the Work to completion and shall not exceed time limits current under the Contract Documents. The schedule shall be revised at appropriate intervals as required by the conditions of the Work and Project.

§ 3.10.2 The Contractor, promptly after being awarded the Contract and thereafter as necessary to maintain a current submittal schedule, shall submit a submittal schedule for the Owner's approval. The Owner's approval shall not be unreasonably delayed or withheld. The submittal schedule shall (1) be coordinated with the Contractor's construction schedule, and (2) allow the Owner reasonable time to review submittals. If the Contractor fails to submittal schedule, or fails to provide submittals in accordance with the approved submittal schedule, the Contractor shall not be entitled to any increase in Contract Sum or extension of Contract Time based on the time required for review of submittals.

§ 3.10.3 The Contractor shall perform the Work in general accordance with the most recent schedules submitted to the Owner.

§ 3.11 Documents and Samples at the Site

The Contractor shall make available, at the Project site, the Contract Documents, including Change Orders, Construction Change Directives, and other Modifications, in good order and marked currently to indicate field changes and selections made during construction, and the approved Shop Drawings, Product Data, Samples, and similar required submittals. These shall be in electronic form or paper copy, available to the Owner, and delivered to the Owner upon completion of the Work as a record of the Work as constructed.

§ 3.12 Shop Drawings, Product Data and Samples

§ 3.12.1 Shop Drawings are drawings, diagrams, schedules, and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier, or distributor to illustrate some portion of the Work.

§ 3.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams, and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.

§ 3.12.3 Samples are physical examples that illustrate materials, equipment, or workmanship, and establish standards by which the Work will be judged.

§ 3.12.4 Shop Drawings, Product Data, Samples, and similar submittals are not Contract Documents. Their purpose is to demonstrate how the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents for those portions of the Work for which the Contract Documents require submittals. Review by the Architect is subject to the limitations of Section 4.2.7. Informational submittals upon which the Architect is not expected to take responsive action may be so identified in the Contract Documents. Submittals that are not required by the Contract Documents may be returned by the Architect without action.

§ 3.12.5 The Contractor shall review for compliance with the Contract Documents, approve, and submit to the Owner, Shop Drawings, Product Data, Samples, and similar submittals required by the Contract Documents, in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal

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schedule, with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of Separate Contractors.

§ 3.12.6 By submitting Shop Drawings, Product Data, Samples, and similar submittals, the Contractor represents to the Owner that the Contractor has (1) reviewed and approved them, (2) determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and (3) checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.

§ 3.12.7 The Contractor shall perform no portion of the Work for which the Contract Documents require submittal and review of Shop Drawings, Product Data, Samples, or similar submittals, until the respective submittal has been approved by the Owner.

§ 3.12.8 The Work shall be in accordance with approved submittals except that the Contractor shall not be relieved of responsibility for deviations from the requirements of the Contract Documents by the Owner's approval of Shop Drawings, Product Data, Samples, or similar submittals, unless the Contractor has specifically notified the Owner of such deviation at the time of submittal and (1) the Owner has given written approval to the specific deviation as a minor change in the Work, or (2) a Change Order or Construction Change Directive has been issued authorizing the deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples, or similar submittals, by the Owner's approval thereof.

§ 3.12.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, Product Data, Samples, or similar submittals, to revisions other than those requested by the Owner on previous submittals. In the absence of such notice, the Owner's approval of a resubmission shall not apply to such revisions.

§ 3.12.10 The Contractor shall not be required to provide professional services that constitute the practice of architecture or engineering unless such services are specifically required by the Contract Documents for a portion of the Work or unless the Contractor needs to provide such services in order to carry out the Contractor's responsibilities for construction means, methods, techniques, sequences, and procedures. The Contractor shall not be required to provide professional services in violation of applicable law.

§ 3.12.10.1 If professional design services or certifications by a design professional related to systems, materials, or equipment are specifically required of the Contractor by the Contract Documents, the Owner will specify all performance and design criteria that such services must satisfy. The Contractor shall be entitled to rely upon the adequacy and accuracy of the performance and design criteria provided in the Contract Documents. The Contractor shall cause such services or certifications to be provided by an appropriately licensed design professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings, and other submittals prepared by such professional. Shop Drawings, and other submittals related to the Work, designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to the Owner. The Owner shall be entitled to rely upon the adequacy and accuracy of the services. certifications, and approvals performed or provided by such design professionals, provided the Owner has specified to the Contractor the performance and design criteria that such services must satisfy. Pursuant to this Section 3.12.10, the Owner will review and approve or take other appropriate action on submittals only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents.

§ 3.12.10.2 If the Contract Documents require the Contractor's design professional to certify that the Work has been performed in accordance with the design criteria, the Contractor shall furnish such certifications to the Architect at the time and in the form specified by the Architect.

§ 3.13 Use of Site

The Contractor shall confine operations at the site to areas permitted by applicable laws, statutes, ordinances, codes, rules and regulations, lawful orders of public authorities, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

§ 3.14 Cutting and Patching

§ 3.14.1 The Contractor shall be responsible for cutting, fitting, or patching required to complete the Work or to make its parts fit together properly. All areas requiring cutting, fitting, or patching shall be restored to the condition existing prior to the cutting, fitting, or patching, unless otherwise required by the Contract Documents.

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§ 3.14.2 The Contractor shall not damage or endanger a portion of the Work or fully or partially completed construction of the Owner or Separate Contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter construction by the Owner or a Separate Contractor except with written consent of the Owner and of the Separate Contractor. Consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold, from the Owner or a Separate Contractor, its consent to cutting or otherwise altering the Work.

§ 3.15 Cleaning Up

§ 3.15.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials and rubbish caused by operations under the Contract. At completion of the Work, the Contractor shall remove waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials from and about the Project. Contractor to be in compliance with Section 6002 of the Solid Waste Disposal Act as amended by Resource Conservation & Recovery Act.

§ 3.15.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the Owner shall be entitled to reimbursement from the Contractor.

§ 3.16 Access to Work

The Contractor shall provide the Owner and Architect with access to the Work in preparation and progress wherever located.

§ 3.17 Royalties, Patents and Copyrights

The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of copyrights and patent rights and shall hold the Owner harmless from loss on account thereof, but shall not be responsible for defense or loss when a particular design, process, or product of a particular manufacturer or manufacturers is required by the Contract Documents, or where the copyright violations are contained in Drawings, Specifications, or other documents prepared by the Owner. However, if an infringement of a copyright or patent is discovered by, or made known to, the Contractor, the Contractor shall be responsible for the loss unless the information is promptly furnished to the Owner. Contractor is to be in compliance with the Right of Inventions Act (37 CFR Part 401).

§ 3.18 Indemnification

§ 3.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), but only to the extent caused by the negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, regardless of whether or not such claim, damage, loss, or expense is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity that would otherwise exist as to a party or person described in this Section 3.18.

§ 3.18.2 In claims against any person or entity indemnified under this Section 3.18 by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them, or anyone for whose acts they may be liable, the indemnification obligation under Section 3.18.1 shall not be limited by a limitation on amount or type of damages, compensation, or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts, or other employee benefit acts.

ARTICLE 4 ARCHITECT

§ 4.1 General

§ 4.1.1 The Architect is the person or entity retained by the Owner pursuant to Section 2.3.2 and identified as such in the Agreement.

§ 4.1.2 Duties, responsibilities, and limitations of authority of the Architect as set forth in the Contract Documents shall not be restricted, modified, or extended without written consent of the Owner, Contractor, and Architect. Consent shall not be unreasonably withheld.

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§ 4.2 Administration of the Contract

§ 4.2.1 The Owner will provide administration of the Contract as described in the Contract Documents during construction until the date the Owner issues the final Certificate for Payment.

§ 4.2.2 The Owner will visit the site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the portion of the Work completed, and to determine in general if the Work observed is being performed in a manner indicating that the Work, when fully completed, will be in accordance with the Contract Documents. However, the Owner will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. The Owner will not have control over, charge of, or responsibility for the construction means, methods, techniques, sequences or procedures, or for the safety precautions and programs in connection with the Work, since these are solely the Contractor's rights and responsibilities under the Contract Documents.

§ 4.2.3 On the basis of the site visits, the Owner will identify (1) known deviations from the Contract Documents, (2) known deviations from the most recent construction schedule submitted by the Contractor, and (3) defects and deficiencies observed in the Work. The Owner will not be responsible for the Contractor's failure to perform the Work in accordance with the requirements of the Contract Documents. The Owner will not have control over or charge of, and will not be responsible for acts or omissions of, the Contractor, Subcontractors, or their agents or employees, or any other persons or entities performing portions of the Work.

§ 4.2.4 The Owner will conduct a mandatory pre-construction meeting with the Contractor. The meeting will include but is not limited to a review of the scope of work, project schedules, general requirements for construction work, jobsite security, staging and storage areas, material recycling and salvage, jobsite cleanup, and tests, samples and construction observation. The meeting will also include a review of the submittal process for applications for payment, the change order process, the process for progress payments, the final application for payment, and release of retention. A review of the Certified Payroll process will also be conducted. A separate Certified Payroll training session will be conducted by the Owner with the Contractor and with each subcontractor.

§ 4.2.5 A separate meeting will be also be conducted to review the Section 3 plan submitted by the Contractor and to review of the Section 3 reporting procedures.

§ 4.2.6 The Contractor shall contact the local jurisdiction to conduct a pre-construction conference with building officials and other local agencies as applicable for the project.

§ 4.2.4 Communications

Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate with each other directly about matters arising out of or relating to the Contract. Communications by and with the Architect's consultants shall be through the Owner. Communications by and with Subcontractors and suppliers shall be through the Contractor. Communications by and with Separate Contractors shall be through the Owner. The Contract Documents may specify other communication protocols.

§ 4.2.5 Based on the Owner's evaluations of the Contractor's Applications for Payment, the Owner will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.

§ 4.2.6 The Owner has authority to reject Work that does not conform to the Contract Documents. Whenever the Owner considers it necessary or advisable, the Owner will have authority to require inspection or testing of the Work in accordance with Sections 13.4.2 and 13.4.3, whether or not the Work is fabricated, installed or completed. However, neither this authority of the Owner nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Owner to the Contractor, Subcontractors, suppliers, their agents or employees, or other persons or entities performing portions of the Work.

§ 4.2.7 The Owner and/or Architect will review and approve, or take other appropriate action upon, the Contractor's submittals such as Shop Drawings, Product Data, and Samples, but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Owner and/or Architect's action will be taken in accordance with the submittal schedule approved by the Owner or, in the absence of an approved submittal schedule, with reasonable promptness while allowing sufficient time in the Owner's professional judgment to permit adequate review. Review of such submittals is not conducted for the

purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Owner's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Sections 3.3, 3.5, and 3.12. The Owner and/or Architect's review shall not constitute approval of safety precautions or of any construction means, methods, techniques, sequences, or procedures. The Owner's and/or Architect's approval of a specific item shall not indicate approval of an assembly of which the item is a component.

§ 4.2.8 The Owner will prepare Change Orders and Construction Change Directives, and may order minor changes in the Work as provided in Section 7.4. The Owner will investigate and make determinations and recommendations regarding concealed and unknown conditions as provided in Section 3.7.4.

§ 4.2.9 The Owner will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion; issue Certificates of Substantial Completion pursuant to Section 9.8; written warranties and related documents required by the Contract and assembled by the Contractor pursuant to Section 9.10; and issue a final Certificate for Payment pursuant to Section 9.10.

§ 4.2.11 The Owner will interpret and decide matters concerning performance under, and requirements of, the Contract Documents. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness.

§ 4.2.12 Interpretations and decisions of the Owner will be consistent with the intent of, and reasonably inferable from, the Contract Documents and will be in writing or in the form of drawings..

§ 4.2.13 The Owner's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

§ 4.2.14 The Owner will review and respond to requests for information about the Contract Documents. The Owner's response to such requests will be made in writing within any time limits agreed upon or otherwise with reasonable promptness. If appropriate, the Architect will assist the Owner and respond to Requests For Information (RFI's) as directed by the Owner and will prepare and issue supplemental Drawings and Specifications in response to the Requests For Information.

ARTICLE 5 SUBCONTRACTORS

§ 5.1 Definitions

§ 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a Separate Contractor or the subcontractors of a Separate Contractor.

§ 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

§ 5.2 Award of Subcontracts and Other Contracts for Portions of the Work

§ 5.2.1 Unless otherwise stated in the Contract Documents, the Contractor, as soon as practicable after award of the Contract, shall confirm for the Owner of the persons or entities for each principal portion of the Work, including those who are to furnish materials or equipment fabricated to a special design as identified in the Bid Documents. Within 14 days of receipt of the information, the Owner may notify the Contractor whether the Owner (1) has reasonable objection to any such proposed person or entity or (2) requires additional time for review. Failure of the Owner to provide notice within the 14-day period shall constitute notice of no reasonable objection.

§ 5.2.2 The Contractor shall not contract with a proposed person or entity to whom the Owner has made reasonable and timely objection. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable objection. The Contractor shall ensure that all and any Subcontractor(s) are not on any Debarment Lists and are Not Excluded from performing work on Federally Funded Projects. The Contractor shall provide written evidence of such to the Owner prior to the commencement of work.

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§ 5.2.3 If the Owner has reasonable objection to a person or entity proposed by the Contractor, the Contractor shall propose another to whom the Owner has no reasonable objection. If the proposed but rejected Subcontractor was reasonably capable of performing the Work, the Contract Sum and Contract Time shall be increased or decreased by the difference, if any, occasioned by such change, and an appropriate Change Order shall be issued before commencement of the substitute Subcontractor's Work. However, no increase in the Contract Sum or Contract Time shall be allowed for such change unless the Contractor has acted promptly and responsively in submitting names as required.

§ 5.2.4 The Contractor shall not substitute a Subcontractor, person, or entity for one previously selected if the Owner makes reasonable objection to such substitution.

§ 5.3 Subcontractual Relations

By appropriate written agreement, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the obligations and responsibilities, including the responsibility for safety of the Subcontractor's Work that the Contractor, by these Contract Documents, assumes toward the Owner and Architect. Each subcontract agreement shall preserve and protect the rights of the Owner and Architect under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies, and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement that may be at variance with the Contract Documents. Subcontractors will similarly make copies of applicable portions of such documents available to their respective proposed Subsubcontractors.

§ 5.4 Contingent Assignment of Subcontracts

§ 5.4.1 Each subcontract agreement for a portion of the Work is assigned by the Contractor to the Owner, provided that

- assignment is effective only after termination of the Contract by the Owner for cause pursuant to .1 Section 14.2 and only for those subcontract agreements that the Owner accepts by notifying the Subcontractor and Contractor; and
- .2 assignment is subject to the prior rights of the surety, if any, obligated under bond relating to the Contract.

When the Owner accepts the assignment of a subcontract agreement, the Owner assumes the Contractor's rights and obligations under the subcontract.

§ 5.4.2 Upon such assignment, if the Work has been suspended for more than 30 days, the Subcontractor's compensation shall be equitably adjusted for increases in cost resulting from the suspension.

§ 5.4.3 Upon assignment to the Owner under this Section 5.4, the Owner may further assign the subcontract to a successor contractor or other entity. If the Owner assigns the subcontract to a successor contractor or other entity, the Owner shall nevertheless remain legally responsible for all of the successor contractor's obligations under the subcontract.

ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

§ 6.1 Owner's Right to Perform Construction and to Award Separate Contracts

§ 6.1.1 The term "Separate Contractor(s)" shall mean other contractors retained by the Owner under separate agreements. The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and with Separate Contractors retained under Conditions of the Contract substantially similar to those of this Contract, including those provisions of the Conditions of the Contract related to insurance and waiver of subrogation.

§ 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.

§ 6.1.3 The Owner shall provide for coordination of the activities of the Owner's own forces and of each Separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with any Separate Contractors and the Owner in reviewing their construction schedules. The Contractor shall make any revisions to its construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor, Separate Contractors, and the Owner until subsequently revised.

§ 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces or with Separate Contractors, the Owner or its Separate Contractors shall have the same obligations and rights that the Contractor has under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10, 11, and 12.

§ 6.2 Mutual Responsibility

§ 6.2.1 The Contractor shall afford the Owner and Separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities, and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.

§ 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a Separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly notify the Owner of apparent discrepancies or defects in the construction or operations by the Owner or Separate Contractor that would render it unsuitable for proper execution and results of the Contractor's Work. Failure of the Contractor to notify the Owner of apparent discrepancies or defects prior to proceeding with the Work shall constitute an acknowledgment that the Owner's or Separate Contractor's completed or partially completed construction is fit and proper to receive the Contractor's Work. The Contractor shall not be responsible for discrepancies or defects in the contractor that are not apparent.

§ 6.2.3 The Contractor shall reimburse the Owner for costs the Owner incurs that are payable to a Separate Contractor because of the Contractor's delays, improperly timed activities or defective construction. The Owner shall be responsible to the Contractor for costs the Contractor incurs because of a Separate Contractor's delays, improperly timed activities, damage to the Work or defective construction.

§ 6.2.4 The Contractor shall promptly remedy damage that the Contractor wrongfully causes to completed or partially completed construction or to property of the Owner or Separate Contractor as provided in Section 10.2.5.

§ 6.2.5 The Owner and each Separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Section 3.14.

§ 6.2.6 The Contractor is obligated to comply with all Davis-Bacon and/or State Prevailing regulations if applicable, and shall inform all Subcontractors of this mandatory requirement. Strict compliance of the provisions of certified payrolls and monitoring of that compliance is a direct responsibility of the Contractor for each Subcontractor. Failure of the Contractor to monitor Davis-Bacon requirements including certified payroll compliance by Subcontractors, as evidenced by the Owner's review and written correction notices provided to the Contractor of non-compliance, will result in delay of progress payments to the Contractor by the Owner.

§ 6.3 Owner's Right to Clean Up

If a dispute arises among the Contractor, Separate Contractors, and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish, the Owner may clean up and the Owner will allocate the cost among those responsible.

ARTICLE 7 CHANGES IN THE WORK

§ 7.1 General

§ 7.1.1

.1 The Owner anticipates that it will desire the Contractor to accomplish Work that was not able to be reasonably defined in sufficient detail during the solicitation for Bids for this Project. The

Contractor agrees to perform such Owner Directed Work in accordance with the Contract Documents.

- .2 A fixed sum has been determined by the Owner for each individual and separate Owner Directed Work Item. The total Contract Amount includes the lump sum total of all combined Owner Directed Work Items. It is at the Sole Discretion and Decision of the Owner to Authorize the Contractor to proceed with each individual Owner Directed Work Item. If any or all Owner Directed Work Items are determined to be excluded from the Work, the Owner will provide a Change Order to the Contractor to deduct those amounts from the Contract.
- .3 If any or all Owner Directed Work Items are authorized by the Owner to be completed. The Owner will issue an Owner Directed Work Order to the Contractor for that Work Item.
- .4 For each Owner Directed Work Order issued to the Owner, the Contractor shall provide a complete and detailed cost estimate for that item to the Owner. The Contractor's estimate shall be approved by the Owner, prior to the commencement of any Owner Directed Work. Adjustments to the Contract may be made as an additive or deductive Change Order as determined by the difference between the Owner Directed Work Item Allowance, the Final Approved Estimated Cost as submitted by the Contractor, and the final Analysis of the Cost as conducted by the Owner.
- .5 The Contractor shall provide a complete and accurate time and material account and reconciliation report to the Owner for each issued work authorization for each Owner Directed Work Item.
- .6 Owner Directed Work Items are defined in the Contract Documents.

§ 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents. All changes in the Work shall be completed for a Fixed Fee.

- .1 Overhead, Profit, and General Conditions
 - (a.) The allowed markup shall cover all indirect project costs, including but not limited to: project Overhead, Profit, and General Conditions
 - (b.) The Contractor shall be allowed a maximum of 14% Overhead, Profit, and General Conditions, on the cost of craft labor, equipment, small tools and materials for self-performed Change Order work.
 - (c.) The Contractor shall be allowed a maximum of 8% Overhead, Profit, and General Conditions on the cost of craft labor, equipment, small tools and materials for Subcontractor Change Order work. The Contractor is not allowed to take a profit on the profit of the Subcontractor, as stated in form HUD-5370, section 29.
 - (d.) A Subcontractor shall be allowed a maximum of 14% of the cost of craft labor, equipment, materials, and small tools for Overhead, Profit, and General Conditions, for performing self-performed Change Order work.
 - (e.) A Lower Tier Subcontractor shall be allowed a maximum of 14% of the cost of craft labor, equipment, materials, and small tools for Overhead, Profit, and General Conditions, for performing Change Order work.

§ 7.1.2 A Change Order shall be based upon agreement among the Owner and Contractor. A Construction Change Directive requires agreement by the Owner and may or may not be agreed to by the Contractor. An order for a minor change in the Work may be issued by the Owner.

§ 7.1.3 Changes in the Work shall be performed under applicable provisions of the Contract Documents. The Contractor shall proceed promptly with changes in the Work, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.

§ 7.2 Change Orders

§ 7.2.1 A Change Order is a written instrument prepared by the Owner and signed by the Owner and Contractor stating their agreement upon all of the following:

- .1 The change in the Work;
- .2 The amount of the adjustment, if any, in the Contract Sum; and
- .3 The extent of the adjustment, if any, in the Contract Time.

§ 7.3 Construction Change Directives § 7.3.1

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A Construction Change Directive shall be provided as stipulated by the Owner and in accordance with the King County Housing Authority Change Order Request documents (COR) per Exhibit as designated in Document A101-2017, Article 9.1.7.2. The COR is a written order prepared by the Owner and signed by the Owner and upon Owner's request, by the Architect, directing a change in the Work prior to agreement on adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Contract Time being adjusted accordingly.

§ 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order. The Owner's Change Order Request / Change Order Approval Form (COR/COA) per Exhibit as designated in Contract Document A101-2017, Article 9.1.7.2, including the General Contractor Breakdown Summary (GC-COR) Exhibit, and the Subcontractor Breakdown Summary (SC-COR) Exhibit, shall be used by the Contractor for all construction change directives.

§ 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods:

- .1 Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
- .2 Unit prices stated in the Contract Documents or subsequently agreed upon;
- .3 Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or
- .4 As provided in Section 7.3.4.

§ 7.3.4 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the Owner shall determine the adjustment on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, an amount for overhead and profit as set forth in the Agreement, or if no such amount is set forth in the Agreement, a reasonable amount. In such case, and also under Section 7.3.3.3, the Contractor shall keep and present, in such form as the Owner may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Section 7.3.4 shall be limited to the following:

- .1 Costs of labor, including applicable payroll taxes, fringe benefits required by agreement or custom, workers' compensation insurance, and other employee costs approved by the Owner;
- .2 Costs of materials, supplies, and equipment, including cost of transportation, whether incorporated or consumed;
- .3 Rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others;
- .4 Costs of premiums for all bonds and insurance, permit fees, and sales, use, or similar taxes, directly related to the change; and
- .5 Costs of supervision and field office personnel directly attributable to the change.

§ 7.3.5 If the Contractor disagrees with the adjustment in the Contract Time, the Contractor may make a Claim in accordance with applicable provisions of Article 15.

§ 7.3.6 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Owner of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Contract Time.

§ 7.3.7 A Construction Change Directive signed by the Contractor indicates the Contractor's agreement therewith, including adjustment in Contract Sum and Contract Time or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.

§ 7.3.8 The amount of credit to be allowed by the Contractor to the Owner for a deletion or change that results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Owner. When both additions and credits covering related Work or substitutions are involved in a change, the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

§ 7.3.9 Pending final determination of the total cost of a Construction Change Directive to the Owner, the Contractor may request payment for Work completed under the Construction Change Directive in Applications for Payment. The Owner will make an interim determination for purposes of monthly certification for payment for those costs and certify for payment the amount that the Owner determines to be reasonably justified. The Owner's interim determination of cost shall adjust the Contract Sum on the same basis as a Change Order, subject to the right of either party to disagree and assert a Claim in accordance with Article 15.

§ 7.3.10 When the Owner and Contractor agree with a determination made concerning the adjustments in the Contract Sum and Contract Time, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and the Owner will prepare a Change Order. Change Orders may be issued for all or any part of a Construction Change Directive.

§ 7.4 Minor Changes in the Work

The Architect may order minor changes in the Work that are consistent with the intent of the Contract Documents and do not involve an adjustment in the Contract Sum or an extension of the Contract Time. The Architect's order for minor changes shall be in writing. If the Contractor believes that the proposed minor change in the Work will affect the Contract Sum or Contract Time, the Contractor shall notify the Architect and shall not proceed to implement the change in the Work. If the Contractor performs the Work set forth in the Architect's order for a minor change without prior notice to the Architect that such change will affect the Contract Sum or Contract Time, the Contractor waives any adjustment to the Contract Sum or extension of the Contract Time.

ARTICLE 8 TIME

§ 8.1 Definitions

§ 8.1.1 Unless otherwise provided, Contract Time is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.

§ 8.1.2 The date of commencement of the Work is the date established in the Agreement.

§ 8.1.3 The date of Substantial Completion is the date certified by the Owner in accordance with Section 9.8.

§ 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

§ 8.2 Progress and Completion

§ 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing the Work.

§ 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, commence the Work prior to the effective date of insurance required to be furnished by the Contractor and Owner.

§ 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Contract Time.

§ 8.3 Delays and Extensions of Time

§ 8.3.1 If the Contractor is delayed at any time in the commencement or progress of the Work by (1) an act or neglect of the Owner or Architect, of an employee of either, or of a Separate Contractor; (2) by changes ordered in the Work; (3) by labor disputes, fire, unusual delay in deliveries, unavoidable casualties, adverse weather conditions documented in accordance with Section 15.1.6.2, or other causes beyond the Contractor's control; (4) by delay authorized by the Owner pending mediation and binding dispute resolution; or (5) by other causes that the Contractor asserts, and the Owner determines, justify delay, then the Contract Time shall be extended for such reasonable time as the Owner may determine.

§ 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Article 15.

§ 8.3.3 This Section 8.3 does not preclude recovery of damages for delay by either party under other provisions of the Contract Documents.

ARTICLE 9 PAYMENTS AND COMPLETION

§ 9.1 Contract Sum

§ 9.1.1 The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.

§ 9.1.2 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are materially changed so that application of such unit prices to the actual quantities causes substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.

§ 9.2 Schedule of Values

Where the Contract is based on a stipulated sum or Guaranteed Maximum Price, the Contractor shall submit a schedule of values to the Owner before the first Application for Payment, allocating the entire Contract Sum to the various portions of the Work. The schedule of values shall be prepared in the form, and supported by the data to substantiate its accuracy, required by the Owner. This schedule shall be used as a basis for reviewing the Contractor's Applications for Payment. Any changes to the schedule of values shall be submitted to the Owner and supported by such data to substantiate its accuracy as the Owner may require, and unless objected to by the Owner, shall be used as a basis for reviewing the Contractor's subsequent Applications for Payment.

§ 9.3 Applications for Payment

§ 9.3.1 At least ten days before the date established for each progress payment, the Contractor shall submit to the Owner an itemized Application for Payment using AIA Form G701 and AIA Form G702 and in accordance with Article 5 of A101-2017 prepared in accordance with the schedule of values, if required under Section 9.2, for completed portions of the Work. The application shall be notarized, if required, and supported by all data substantiating the Contractor's right to payment that the Owner require, such as copies of requisitions, and releases and waivers of liens from Subcontractors and suppliers, and shall reflect retainage if provided for in the Contract Documents.

§ 9.3.1.1 As provided in Section 7.3.9, such applications may include requests for payment on account of changes in the Work that have been properly authorized by Construction Change Directives.

§ 9.3.1.2 Applications for Payment shall not include requests for payment for portions of the Work for which the Contractor does not intend to pay a Subcontractor or supplier, unless such Work has been performed by others whom the Contractor intends to pay.

§ 9.3.2 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include the costs of applicable insurance, storage, and transportation to the site, for such materials and equipment stored off the site.

§ 9.3.3 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information, and belief, be free and clear of liens, claims, security interests, or encumbrances, in favor of the Contractor, Subcontractors, suppliers, or other persons or entities that provided labor, materials, and equipment relating to the Work.

§ 9.4 Certificates for Payment

§ 9.4.1 The Architect will, within seven days after receipt of the Contractor's Application for Payment, either (1) issue to the Owner a Certificate for Payment in the full amount of the Application for Payment, with a copy to the Contractor; or (2) issue to the Owner a Certificate for Payment for such amount as the Architect determines is properly due, and notify the Contractor and Owner of the Architect's reasons for withholding certification in part as provided in Section 9.5.1; or (3) withhold certification of the entire Application for Payment, and notify the Contractor and Owner of the Architect's reason for withholding certification in Section 9.5.1.

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§ 9.5 Decisions to Withhold Certification

§ 9.5.1 The Owner may withhold Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Owner's opinion the representations to the Owner required by Section 9.4.2 cannot be made. If the Owner is unable to certify payment in the amount of the Application, the Owner will notify the Contractor as provided in Section 9.4.1. If the Contractor and Owner cannot agree on a revised amount, the Owner will promptly release Payment for the amount for which the Owner is able to make such representations. The Owner may also withhold a Certificate for Payment or, because of subsequently discovered evidence, may nullify the whole or a part of a Payment previously issued, to such extent as may be necessary in the Owner's opinion to protect the Owner from loss for which the Contractor is responsible, including loss resulting from acts and omissions described in Section 3.3.2, because of

- .1 defective Work not remedied;
- .2 third party claims filed or reasonable evidence indicating probable filing of such claims, unless security acceptable to the Owner is provided by the Contractor;
- .3 failure of the Contractor to make payments properly to Subcontractors or suppliers for labor, materials or equipment;
- .4 reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum;
- .5 damage to the Owner or a Separate Contractor;
- .6 reasonable evidence that the Work will not be completed within the Contract Time, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or
- .7 repeated failure to carry out the Work in accordance with the Contract Documents.

§ 9.5.2 When either party disputes the Architect's decision regarding a Certificate for Payment under Section 9.5.1, in whole or in part, that party may submit a Claim in accordance with Article 15.

§ 9.5.3 When the reasons for withholding certification are removed, approval will be made for amounts previously withheld.

§ 9.5.4 If the Owner withholds payment under Section 9.5.1.3, the Owner may, at its sole option, issue joint checks to the Contractor and to any Subcontractor or supplier to whom the Contractor failed to make payment for Work properly performed or material or equipment suitably delivered. If the Owner makes payments by joint check, the Owner shall notify and the Contractor shall reflect such payment on its next Application for Payment.

§ 9.6 Progress Payments

§ 9.6.1 After the Owner has issued an Application for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents.

§ 9.6.2 The Contractor shall pay each Subcontractor, no later than seven days after receipt of payment from the Owner, the amount to which the Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of the Subcontractor's portion of the Work. The Contractor shall, by appropriate agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in a similar manner.

§ 9.6.3 The Owner will, on request, furnish to a Subcontractor, if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Owner on account of portions of the Work done by such Subcontractor.

§ 9.6.4 The Owner has the right to request written evidence from the Contractor that the Contractor has properly paid Subcontractors and suppliers amounts paid by the Owner to the Contractor for subcontracted Work. If the Contractor fails to furnish such evidence within seven days, the Owner shall have the right to contact Subcontractors and suppliers to ascertain whether they have been properly paid. The Owner shall have an obligation to pay, or to see to the payment of money to, a Subcontractor or supplier, except as may otherwise be required by law.

§ 9.6.5 The Contractor's payments to suppliers shall be treated in a manner similar to that provided in Sections 9.6.2, 9.6.3 and 9.6.4.

§ 9.6.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.

§ 9.6.7 Unless the Contractor provides the Owner with a payment bond in the full penal sum of the Contract Sum, payments received by the Contractor for Work properly performed by Subcontractors or provided by suppliers shall be held by the Contractor for those Subcontractors or suppliers who performed Work or furnished materials, or both, under contract with the Contractor for which payment was made by the Owner. Nothing contained herein shall require money to be placed in a separate account and not commingled with money of the Contractor, create any fiduciary liability or tort liability on the part of the Contractor for breach of trust, or entitle any person or entity to an award of punitive damages against the Contractor for breach of the requirements of this provision.

§ 9.6.8 Provided the Owner has fulfilled its payment obligations under the Contract Documents, the Contractor shall defend and indemnify the Owner from all loss, liability, damage or expense, including reasonable attorney's fees and litigation expenses, arising out of any lien claim or other claim for payment by any Subcontractor or supplier of any tier. Upon receipt of notice of a lien claim or other claim for payment, the Owner shall notify the Contractor. If approved by the applicable court, when required, the Contractor may substitute a surety bond for the property against which the lien or other claim for payment has been asserted.

§ 9.7 Failure of Payment

If the Owner does not issue a Certificate for Payment, through no fault of the Contractor, within seven days after receipt of the Contractor's Application for Payment, or if the Owner does not pay the Contractor within seven days after the date established in the Contract Documents, the amount certified by the Owner or awarded by binding dispute resolution, then the Contractor may, upon seven additional days' notice to the Owner, stop the Work until payment of the amount owing has been received. The Contractor Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable costs of shutdown, delay and start-up, plus interest as provided for in the Contract Documents.

§ 9.8 Substantial Completion

§ 9.8.1 Substantial Completion is the stage in the progress of the Work when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work for its intended use.

§ 9.8.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Owner a comprehensive list of items to be completed or corrected prior to final payment. Failure to include an item on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

§ 9.8.3 Upon receipt of the Contractor's list, the Owner will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Owner's inspection discloses any item, whether or not included on the Contractor's list, which is not sufficiently complete in accordance with the Contract Documents so that the Owner can occupy or utilize the Work or designated portion thereof for its intended use, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Owner. In such case, the Contractor shall then submit a request for another inspection by the Owner to determine Substantial Completion.

§ 9.8.4 When the Work or designated portion thereof is substantially complete, the Owner will prepare a Certificate of Substantial Completion that shall establish the date of Substantial Completion; establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance; and fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion.

§ 9.8.5 The Certificate of Substantial Completion shall be submitted to the Contractor for written acceptance of responsibilities assigned in the Certificate. Upon such acceptance, and consent of surety if any, the Owner shall make payment of retainage applying to the Work or designated portion thereof. Such payment shall be adjusted for Work that is incomplete or not in accordance with the requirements of the Contract Documents.

§ 9.9 Partial Occupancy or Use

§ 9.9.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is consented to by the insurer and authorized by public authorities having jurisdiction over the Project. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage, if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Owner as provided under Section 9.8.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor.

§ 9.9.2 Immediately prior to such partial occupancy or use, the Owner and Contractor shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

§ 9.9.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

§ 9.10 Final Completion and Final Payment

§ 9.10.1 Upon receipt of the Contractor's notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Owner will promptly make such inspection. When the Owner finds the Work acceptable under the Contract Documents and the Contract fully performed, the Owner will promptly notify the Contractor that to the best of the Owner's knowledge, information and belief, and on the basis of the Owner's on-site visits and inspections, the Work has been completed in accordance with the Contract Documents and that the entire balance found to be due the Contractor and noted in the final Application for Payment is due and payable. The Owner's acceptance will constitute a further representation that conditions listed in Section 9.10.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

§ 9.10.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Owner (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Contract Documents to remain in force after final payment is currently in effect, (3) a written statement that the Contractor knows of no reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment, (5) documentation of any special warranties, such as manufacturers' warranties or specific Subcontractor warranties, and (6) if required by the Owner, other data establishing payment or satisfaction of obligations, such as receipts and releases and waivers of liens, claims, security interests, or encumbrances arising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien, claim, security interest, or encumbrance, including all costs and reasonable attorneys' fees.

§ 9.10.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, the Owner shall, upon application by

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the Contractor and certification by the Owner, and without terminating the Contract, make payment of the balance due for that portion of the Work fully completed, corrected, and accepted. If the remaining balance for Work not fully completed or corrected is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of the surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Owner prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of Claims.

§ 9.10.4 The making of final payment shall constitute a waiver of Claims by the Owner except those arising from

- .1 liens, Claims, security interests, or encumbrances arising out of the Contract and unsettled;
- .2 failure of the Work to comply with the requirements of the Contract Documents;
- .3 terms of special warranties required by the Contract Documents; or
- .4 audits performed by the Owner, if permitted by the Contract Documents, after final payment.

§ 9.10.5 Acceptance of final payment by the Contractor, a Subcontractor, or a supplier, shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

PROTECTION OF PERSONS AND PROPERTY ARTICLE 10

§ 10.1 Safety Precautions and Programs

The Contractor shall be responsible for initiating, maintaining, and supervising all safety precautions and programs in connection with the performance of the Contract.

§ 10.2 Safety of Persons and Property

§ 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury, or loss to

- .1 employees on the Work and other persons who may be affected thereby;
- .2 the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody, or control of the Contractor, a Subcontractor, or a Sub-subcontractor; and
- .3 other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures, and utilities not designated for removal, relocation, or replacement in the course of construction.

§ 10.2.2 The Contractor shall comply with, and give notices required by applicable laws, statutes, ordinances, codes, rules and regulations, and lawful orders of public authorities, bearing on safety of persons or property or their protection from damage, injury, or loss.

§ 10.2.3 The Contractor shall implement, erect, and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards; promulgating safety regulations; and notifying the owners and users of adjacent sites and utilities of the safeguards.

§ 10.2.4 When use or storage of explosives or other hazardous materials or equipment, or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

§ 10.2.5 The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property referred to in Sections 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, a Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Sections 10.2.1.2 and 10.2.1.3. The Contractor may make a Claim for the cost to remedy the damage or loss to the extent such damage or loss is attributable to acts or omissions of the Owner or Architect or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 3.18.

§ 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Owner.

§ 10.2.7 The Contractor shall not permit any part of the construction or site to be loaded so as to cause damage or create an unsafe condition.

§ 10.2.8 Injury or Damage to Person or Property

If either party suffers injury or damage to person or property because of an act or omission of the other party, or of others for whose acts such party is legally responsible, notice of the injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding 21 days after discovery. The notice shall provide sufficient detail to enable the other party to investigate the matter.

§ 10.3 Hazardous Materials and Substances

§ 10.3.1 The Contractor is responsible for compliance with any requirements included in the Contract Documents regarding hazardous materials or substances. If the Contractor encounters a hazardous material or substance not addressed in the Contract Documents and if reasonable precautions will be inadequate to prevent foreseeable bodily injury or death to persons resulting from a material or substance, including but not limited to asbestos or polychlorinated biphenyl (PCB), encountered on the site by the Contractor, the Contractor shall, upon recognizing the condition, immediately stop Work in the affected area and notify the Owner of the condition.

§ 10.3.2 Upon receipt of the Contractor's notice, the Owner shall obtain the services of a licensed laboratory to verify the presence or absence of the material or substance reported by the Contractor and, in the event such material or substance is found to be present, to cause it to be rendered harmless. Unless otherwise required by the Contract Documents, the Owner shall furnish in writing to the Contractor the names and qualifications of persons or entities who are to perform tests verifying the presence or absence of the material or substance or who are to perform the task of removal or safe containment of the material or substance. The Contractor will promptly reply to the Owner in writing stating whether or not there is reasonable objection to the persons or entities proposed by the Owner. If the Contractor has an objection to a person or entity proposed by the Owner, the Owner shall propose another to whom the Contractor has no reasonable objection. When the material or substance has been rendered harmless, Work in the affected area shall resume upon written agreement of the Owner and Contractor. By Change Order, the Contract Time shall be extended appropriately and the Contract Sum shall be increased by the amount of the Contractor's reasonable additional costs of shutdown, delay, and start-up.

§ 10.3.3 To the fullest extent permitted by law, the Owner shall indemnify and hold harmless the Contractor, Subcontractors, Architect, Architect's consultants, and agents and employees of any of them from and against claims, damages, losses, and expenses, including but not limited to attorneys' fees, arising out of or resulting from performance of the Work in the affected area if in fact the material or substance presents the risk of bodily injury or death as described in Section 10.3.1 and has not been rendered harmless, provided that such claim, damage, loss, or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), except to the extent that such damage, loss, or expense is due to the fault or negligence of the party seeking indemnity.

§ 10.3.4 The Owner shall not be responsible under this Section 10.3 for hazardous materials or substances the Contractor brings to the site unless such materials or substances are required by the Contract Documents. The Owner shall be responsible for hazardous materials or substances required by the Contract Documents, except to the extent of the Contractor's fault or negligence in the use and handling of such materials or substances.

§ 10.3.5 The Contractor shall reimburse the Owner for the cost and expense the Owner incurs (1) for remediation of hazardous materials or substances the Contractor brings to the site and negligently handles, or (2) where the Contractor fails to perform its obligations under Section 10.3.1, except to the extent that the cost and expense are due to the Owner's fault or negligence.

§ 10.3.6 If, without negligence on the part of the Contractor, the Contractor is held liable by a government agency for the cost of remediation of a hazardous material or substance solely by reason of performing Work as required by the Contract Documents, the Owner shall reimburse the Contractor for all cost and expense thereby incurred.

§ 10.4 Emergencies

In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 15 and Article 7.

ARTICLE 11 INSURANCE AND BONDS

§ 11.1 Contractor's Insurance and Bonds

§ 11.1.1 The Contractor shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Contractor shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located. The Owner, Architect, and Architect's consultants shall be named as additional insureds under the Contractor's commercial general liability policy or as otherwise described in the Contract Documents.

§ 11.1.2 The Contractor shall provide surety bonds of the types, for such penal sums, and subject to such terms and conditions as required by the Contract Documents. The Contractor shall purchase and maintain the required bonds from a company or companies lawfully authorized to issue surety bonds in the jurisdiction where the Project is located.

§ 11.1.3 Upon the request of any person or entity appearing to be a potential beneficiary of bonds covering payment of obligations arising under the Contract, the Contractor shall promptly furnish a copy of the bonds or shall authorize a copy to be furnished.

§ 11.1.4 Notice of Cancellation or Expiration of Contractor's Required Insurance. Within three (3) business days of the date the Contractor becomes aware of an impending or actual cancellation or expiration of any insurance required by the Contract Documents, the Contractor shall provide notice to the Owner of such impending or actual cancellation or expiration. Upon receipt of notice from the Contractor, the Owner shall, unless the lapse in coverage arises from an act or omission of the Owner, have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by the Contractor. The furnishing of notice by the Contractor shall not relieve the Contractor of any contractual obligation to provide any required coverage.

§ 11.2 Owner's Insurance

§ 11.2.1 The Owner shall purchase and maintain insurance of the types and limits of liability, containing the endorsements, and subject to the terms and conditions, as described in the Agreement or elsewhere in the Contract Documents. The Owner shall purchase and maintain the required insurance from an insurance company or insurance companies lawfully authorized to issue insurance in the jurisdiction where the Project is located.

§ 11.2.2 Failure to Purchase Required Property Insurance. If the Owner fails to purchase and maintain the required property insurance, with all of the coverages and in the amounts described in the Agreement or elsewhere in the Contract Documents, the Owner shall inform the Contractor in writing prior to commencement of the Work. Upon receipt of notice from the Owner, the Contractor may delay commencement of the Work and may obtain insurance that will protect the interests of the Contractor, Subcontractors, and Sub-Subcontractors in the Work. When the failure to provide coverage has been cured or resolved, the Contract Sum and Contract Time shall be equitably adjusted. In the event the Owner fails to procure coverage, the Owner waives all rights against the Contractor, Subcontractors, and Sub-subcontractors, and Sub-subcontractors to the extent the loss to the Owner would have been covered by the insurance to have been procured by the Owner. The cost of the insurance shall be charged to the Owner by a Change Order. If the Owner does not provide written notice, and the Contractor is damaged by the failure or neglect of the Owner to purchase or maintain the required insurance, the Owner shall reimburse the Contractor for all reasonable costs and damages attributable thereto.

§ 11.2.3 Notice of Cancellation or Expiration of Owner's Required Property Insurance. Within three (3) business days of the date the Owner becomes aware of an impending or actual cancellation or expiration of any property insurance required by the Contract Documents, the Owner shall provide notice to the Contractor of such impending or actual cancellation or expiration. Unless the lapse in coverage arises from an act or omission of the Contractor: (1) the Contractor, upon receipt of notice from the Owner, shall have the right to stop the Work until the lapse in coverage has been cured by the procurement of replacement coverage by either the Owner or the Contractor; (2) the Contract Time and Contract Sum shall be equitably adjusted; and (3) the Owner waives all rights against the Contractor, Subcontractors to the extent any loss to the Owner would have been coverage, the cost of the

insurance shall be charged to the Owner by an appropriate Change Order. The furnishing of notice by the Owner shall not relieve the Owner of any contractual obligation to provide required insurance.

§ 11.3 Waivers of Subrogation

§ 11.3.1 The Owner and Contractor waive all rights against (1) each other and any of their subcontractors, subsubcontractors, agents, and employees, each of the other; (2) the Architect and Architect's consultants; and (3) Separate Contractors, if any, and any of their subcontractors, sub-subcontractors, agents, and employees, for damages caused by fire, or other causes of loss, to the extent those losses are covered by property insurance required by the Agreement or other property insurance applicable to the Project, except such rights as they have to proceeds of such insurance. The Owner or Contractor, as appropriate, shall require similar written waivers in favor of the individuals and entities identified above from the Architect, Architect's consultants, Separate Contractors, subcontractors, and sub-subcontractors. The policies of insurance purchased and maintained by each person or entity agreeing to waive claims pursuant to this section 11.3.1 shall not prohibit this waiver of subrogation. This waiver of subrogation shall be effective as to a person or entity (1) even though that person or entity would otherwise have a duty of indemnification, contractual or otherwise, (2) even though that person or entity did not pay the insurance premium directly or indirectly, or (3) whether or not the person or entity had an insurable interest in the damaged property.

§ 11.3.2 If during the Project construction period the Owner insures properties, real or personal or both, at or adjacent to the site by property insurance under policies separate from those insuring the Project, or if after final payment property insurance is to be provided on the completed Project through a policy or policies other than those insuring the Project during the construction period, to the extent permissible by such policies, the Owner waives all rights in accordance with the terms of Section 11.3.1 for damages caused by fire or other causes of loss covered by this separate property insurance.

§ 11.4 Loss of Use, Business Interruption, and Delay in Completion Insurance

The Owner, at the Owner's option, may purchase and maintain insurance that will protect the Owner against loss of use of the Owner's property, or the inability to conduct normal operations, due to fire or other causes of loss. The Owner waives all rights of action against the Contractor and Architect for loss of use of the Owner's property, due to fire or other hazards however caused.

§11.5 Adjustment and Settlement of Insured Loss

§ 11.5.1 A loss insured under the property insurance required by the Agreement shall be adjusted by the Owner as fiduciary and made payable to the Owner as fiduciary for the insureds, as their interests may appear, subject to requirements of any applicable mortgagee clause and of Section 11.5.2. The Owner shall pay the Architect and Contractor their just shares of insurance proceeds received by the Owner, and by appropriate agreements the Architect and Contractor shall make payments to their consultants and Subcontractors in similar manner.

§ 11.5.2 Prior to settlement of an insured loss, the Owner shall notify the Contractor of the terms of the proposed settlement as well as the proposed allocation of the insurance proceeds. The Contractor shall have 14 days from receipt of notice to object to the proposed settlement or allocation of the proceeds. If the Contractor does not object, the Owner shall settle the loss and the Contractor shall be bound by the settlement and allocation. Upon receipt, the Owner shall deposit the insurance proceeds in a separate account and make the appropriate distributions. Thereafter, if no other agreement is made or the Owner does not terminate the Contract for convenience, the Owner and Contractor shall execute a Change Order for reconstruction of the damaged or destroyed Work in the amount allocated for that purpose. If the Contractor timely objects to either the terms of the proposed settlement or the allocation of the proceeds, the Owner may proceed to settle the insured loss, and any dispute between the Owner and Contractor arising out of the settlement or allocation of the proceeds shall be resolved pursuant to Article 15. Pending resolution of any dispute, the Owner may issue a Construction Change Directive for the reconstruction of the damaged or destroyed Work.

ARTICLE 12 UNCOVERING AND CORRECTION OF WORK § 12.1 Uncovering of Work

§ 12.1.1 If a portion of the Work is covered contrary to the Owner's request or to requirements specifically expressed in the Contract Documents, it must, if requested in writing by the Owner, be uncovered for the Owner's examination and be replaced at the Contractor's expense without change in the Contract Time.

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§ 12.1.2 If a portion of the Work has been covered that the Owner has not specifically requested to examine prior to its being covered, the Owner may request to see such Work and it shall be uncovered by the Contractor. If such Work is in accordance with the Contract Documents, the Contractor shall be entitled to an equitable adjustment to the Contract Sum and Contract Time as may be appropriate. If such Work is not in accordance with the Contract Documents, the cost of correction, shall be at the Contractor's expense.

§ 12.2 Correction of Work

§ 12.2.1 Before Substantial Completion

The Contractor shall promptly correct Work rejected by the Owner or failing to conform to the requirements of the Contract Documents, discovered before Substantial Completion and whether or not fabricated, installed or completed. Costs of correcting such rejected Work, including additional testing and inspections, the cost of uncovering and replacement, and compensation for the Owner's services and expenses made necessary thereby, shall be at the Contractor's expense.

§ 12.2.2 After Substantial Completion

§ 12.2.2.1 In addition to the Contractor's obligations under Section 3.5, if, within one year after the date of Substantial Completion of the Work or designated portion thereof or after the date for commencement of warranties established under Section 9.9.1, or by terms of any applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of notice from the Owner to do so, unless the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition. During the one-year period for correction of Work, if the Owner fails to notify the Contractor and give the Contractor and to make a claim for breach of warranty. If the Contractor fails to correct in onconforming Work within a reasonable time during that period after receipt of notice from the Owner, the Owner may correct it in accordance with Section 2.5.

§ 12.2.2. The one-year period for correction of Work shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual completion of that portion of the Work.

§ 12.2.3 The one-year period for correction of Work shall not be extended by corrective Work performed by the Contractor pursuant to this Section 12.2.

§ 12.2.3 The Contractor shall remove from the site portions of the Work that are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.

§ 12.2.4 The Contractor shall bear the cost of correcting destroyed or damaged construction of the Owner or Separate Contractors, whether completed or partially completed, caused by the Contractor's correction or removal of Work that is not in accordance with the requirements of the Contract Documents.

§ 12.2.5 Nothing contained in this Section 12.2 shall be construed to establish a period of limitation with respect to other obligations the Contractor has under the Contract Documents. Establishment of the one-year period for correction of Work as described in Section 12.2.2 relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced, nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the Work.

§ 12.3 Acceptance of Nonconforming Work

If the Owner prefers to accept Work that is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

ARTICLE 13 MISCELLANEOUS PROVISIONS

§ 13.1 Governing Law

The Contract shall be governed by the law of the place where the Project is located, excluding that jurisdiction's choice of law rules. If the parties have selected arbitration as the method of binding dispute resolution, the Federal Arbitration Act shall govern Section 15.4.

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§ 13.2 Successors and Assigns

§ 13.2.1 The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to covenants, agreements, and obligations contained in the Contract Documents. Except as provided in Section 13.2.2, neither party to the Contract shall assign the Contract as a whole without written consent of the other. If either party attempts to make an assignment without such consent, that party shall nevertheless remain legally responsible for all obligations under the Contract.

§ 13.2.2 The Owner may, without consent of the Contractor, assign the Contract to a lender providing construction financing for the Project, if the lender assumes the Owner's rights and obligations under the Contract Documents. The Contractor shall execute all consents reasonably required to facilitate the assignment.

§ 13.3 Rights and Remedies

§ 13.3.1 Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights, and remedies otherwise imposed or available by law.

§ 13.3.2 No action or failure to act by the Owner, or Contractor shall constitute a waiver of a right or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed upon in writing.

§ 13.4 Tests and Inspections

§ 13.4.1 Tests, inspections, and approvals of portions of the Work shall be made as required by the Contract Documents and by applicable laws, statutes, ordinances, codes, rules, and regulations or lawful orders of public authorities. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and shall bear all related costs of tests, inspections, and approvals. The Contractor shall give the Owner timely notice of when and where tests and inspections are to be made so that the Owner may be present for such procedures. The Owner shall bear costs of tests, inspections, or approvals that do not become requirements until after bids are received or negotiations concluded. The Owner shall directly arrange and pay for tests, inspections, or approvals where building codes or applicable laws or regulations so require.

§ 13.4.2 If the Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Section 13.4.1, the Owner will instruct the Contractor to make arrangements for such additional testing, inspection, or approval, by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Owner of when and where tests and inspections are to be made so that the Owner may be present for such procedures. Such costs, except as provided in Section 13.4.3, shall be at the Owner's expense.

§ 13.4.3 If procedures for testing, inspection, or approval under Sections 13.4.1 and 13.4.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, all costs made necessary by such failure, including those of repeated procedures and compensation for the Owner's services and expenses, shall be at the Contractor's expense.

§ 13.4.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Owner.

§ 13.4.5 If the Owner is to observe tests, inspections, or approvals required by the Contract Documents, the Owner will do so promptly and, where practicable, at the normal place of testing.

§ 13.4.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

§ 13.5 Interest

Payments due and unpaid under the Contract Documents shall bear interest from the date payment is due at the rate the parties agree upon in writing or, in the absence thereof, at the legal rate prevailing from time to time at the place where the Project is located.

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ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT

§ 14.1 Termination by the Contractor

§ 14.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 30 consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work, for any of the following reasons:

- .1 Issuance of an order of a court or other public authority having jurisdiction that requires all Work to be stopped;
- .2 An act of government, such as a declaration of national emergency, that requires all Work to be stopped;
- .3 Because the Owner has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Section 9.4.1, or because the Owner has not made payment on a Certificate for Payment within the time stated in the Contract Documents; or
- .4 The Owner has failed to furnish to the Contractor reasonable evidence as required by Section 2.2.

§ 14.1.2 The Contractor may terminate the Contract if, through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons or entities performing portions of the Work under direct or indirect contract with the Contractor, repeated suspensions, delays, or interruptions of the entire Work by the Owner as described in Section 14.3, constitute in the aggregate more than 100 percent of the total number of days scheduled for completion, or 120 days in any 365-day period, whichever is less.

§ 14.1.3 If one of the reasons described in Section 14.1.1 or 14.1.2 exists, the Contractor may, upon seven days' notice to the Owner, terminate the Contract and recover from the Owner payment for Work executed, as well as reasonable overhead and profit on Work not executed, and costs incurred by reason of such termination.

§ 14.1.4 If the Work is stopped for a period of 60 consecutive days through no act or fault of the Contractor, a Sub-subcontractor, or their agents or employees or any other persons or entities performing portions of the Work because the Owner has repeatedly failed to fulfill the Owner's obligations under the Contract Documents with respect to matters important to the progress of the Work, the Contractor may, upon seven additional days' notice to the Owner, terminate the Contract and recover from the Owner as provided in Section 14.1.3.

§ 14.2 Termination by the Owner for Cause

- § 14.2.1 The Owner may terminate the Contract if the Contractor
 - .1 repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
 - .2 fails to make payment to Subcontractors or suppliers in accordance with the respective agreements between the Contractor and the Subcontractors or suppliers;
 - .3 repeatedly disregards applicable laws, statutes, ordinances, codes, rules and regulations, or lawful orders of a public authority; or
 - .4 otherwise is guilty of substantial breach of a provision of the Contract Documents.

§ 14.2.2 When any of the reasons described in Section 14.2.1 exist, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven days' notice, terminate employment of the Contractor and may, subject to any prior rights of the surety:

- .1 Exclude the Contractor from the site and take possession of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- .2 Accept assignment of subcontracts pursuant to Section 5.4; and
- .3 Finish the Work by whatever reasonable method the Owner may deem expedient. Upon written request of the Contractor, the Owner shall furnish to the Contractor a detailed accounting of the costs incurred by the Owner in finishing the Work.

§ 14.2.3 When the Owner terminates the Contract for one of the reasons stated in Section 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is finished.

§ 14.2.4 If the unpaid balance of the Contract Sum exceeds costs of finishing the Work, including compensation for the Architect's services and expenses made necessary thereby, and other damages incurred by the Owner and not expressly waived, such excess shall be paid to the Contractor. If such costs and damages exceed the unpaid balance, the Contractor shall pay the difference to the Owner. The amount to be paid to the Contractor or Owner, as the case may be, upon application, and this obligation for payment shall survive termination of the Contract.

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§ 14.3 Suspension by the Owner for Convenience

§ 14.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay or interrupt the Work, in whole or in part for such period of time as the Owner may determine.

§ 14.3.2 The Contract Sum and Contract Time shall be adjusted for increases in the cost and time caused by suspension, delay, or interruption under Section 14.3.1. Adjustment of the Contract Sum shall include profit. No adjustment shall be made to the extent

- .1 that performance is, was, or would have been, so suspended, delayed, or interrupted, by another cause for which the Contractor is responsible; or
- .2 that an equitable adjustment is made or denied under another provision of the Contract.

§ 14.4 Termination by the Owner for Convenience

§ 14.4.1 The Owner may, at any time, terminate the Contract for the Owner's convenience and without cause.

§ 14.4.2 Upon receipt of notice from the Owner of such termination for the Owner's convenience, the Contractor shall

- .1 cease operations as directed by the Owner in the notice;
- .2 take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- .3 except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.

§ 14.4.3 In case of such termination for the Owner's convenience, the Owner shall pay the Contractor for Work properly executed; costs incurred by reason of the termination, including costs attributable to termination of Subcontracts; and the termination fee, if any, set forth in the Agreement.

ARTICLE 15 CLAIMS AND DISPUTES

§ 15.1 Claims

§ 15.1.1 Definition

A Claim is a demand or assertion by one of the parties seeking, as a matter of right, payment of money, a change in the Contract Time, or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Contract. The responsibility to substantiate Claims shall rest with the party making the Claim.

§ 15.1.2 Time Limits on Claims

The Owner and Contractor shall commence all Claims and causes of action against the other and arising out of or related to the Contract, whether in contract, tort, breach of warranty or otherwise, in accordance with the requirements of the binding dispute resolution method selected in the Agreement and within the period specified by applicable law, but in any case not more than 10 years after the date of Substantial Completion of the Work. The Owner and Contractor waive all Claims and causes of action not commenced in accordance with this Section 15.1.2.

§ 15.1.3 Notice of Claims

§ 15.1.3.1 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered prior to expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party. Claims by either party under this Section 15.1.3.1 shall be initiated within 21 days after occurrence of the event giving rise to such Claim or within 21 days after the claimant first recognizes the condition giving rise to the Claim, whichever is later.

§ 15.1.3.2 Claims by either the Owner or Contractor, where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2, shall be initiated by notice to the other party.

§ 15.1.4 Continuing Contract Performance

§ 15.1.4.1 Pending final resolution of a Claim, except as otherwise agreed in writing or as provided in Section 9.7 and Article 14, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.

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§ 15.1.4.2 The Contract Sum and Contract Time shall be adjusted in accordance with the Initial Decision Maker's decision, subject to the right of either party to proceed in accordance with this Article 15. The Architect will issue Certificates for Payment in accordance with the decision of the Initial Decision Maker.

§ 15.1.5 Claims for Additional Cost

If the Contractor wishes to make a Claim for an increase in the Contract Sum, notice as provided in Section 15.1.3 shall be given before proceeding to execute the portion of the Work that is the subject of the Claim. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 10.4.

§ 15.1.6 Claims for Additional Time

§ 15.1.6.1 If the Contractor wishes to make a Claim for an increase in the Contract Time, notice as provided in Section 15.1.3 shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay, only one Claim is necessary.

§ 15.1.6.2 If adverse weather conditions are the basis for a Claim for additional time, such Claim shall be documented by data substantiating that weather conditions were abnormal for the period of time, could not have been reasonably anticipated, and had an adverse effect on the scheduled construction.

§ 15.1.7 Waiver of Claims for Consequential Damages

The Contractor and Owner waive Claims against each other for consequential damages arising out of or relating to this Contract. This mutual waiver includes

- .1 damages incurred by the Owner for rental expenses, for losses of use, income, profit, financing, business and reputation, and for loss of management or employee productivity or of the services of such persons; and
- .2 damages incurred by the Contractor for principal office expenses including the compensation of personnel stationed there, for losses of financing, business and reputation, and for loss of profit, except anticipated profit arising directly from the Work.

This mutual waiver is applicable, without limitation, to all consequential damages due to either party's termination in accordance with Article 14. Nothing contained in this Section 15.1.7 shall be deemed to preclude assessment of liquidated damages, when applicable, in accordance with the requirements of the Contract Documents.

§ 15.2 Initial Decision

§ 15.2.1 Claims, excluding those where the condition giving rise to the Claim is first discovered after expiration of the period for correction of the Work set forth in Section 12.2.2 or arising under Sections 10.3, 10.4, and 11.5, shall be referred to the Initial Decision Maker for initial decision. The Architect will serve as the Initial Decision Maker, unless otherwise indicated in the Agreement. Except for those Claims excluded by this Section 15.2.1, an initial decision shall be required as a condition precedent to mediation of any Claim. If an initial decision has not been rendered within 30 days after the Claim has been referred to the Initial Decision Maker, the party asserting the Claim may demand mediation and binding dispute resolution without a decision having been rendered. Unless the Initial Decision Maker and all affected parties agree, the Initial Decision Maker will not decide disputes between the Contractor and persons or entities other than the Owner.

§ 15.2.2 The Initial Decision Maker will review Claims and within ten days of the receipt of a Claim take one or more of the following actions: (1) request additional supporting data from the claimant or a response with supporting data from the other party, (2) reject the Claim in whole or in part, (3) approve the Claim, (4) suggest a compromise, or (5) advise the parties that the Initial Decision Maker is unable to resolve the Claim if the Initial Decision Maker lacks sufficient information to evaluate the merits of the Claim or if the Initial Decision Maker concludes that, in the Initial Decision Maker's sole discretion, it would be inappropriate for the Initial Decision Maker to resolve the Claim.

§ 15.2.3 In evaluating Claims, the Initial Decision Maker may, but shall not be obligated to, consult with or seek information from either party or from persons with special knowledge or expertise who may assist the Initial Decision Maker in rendering a decision. The Initial Decision Maker may request the Owner to authorize retention of such persons at the Owner's expense.

§ 15.2.4 If the Initial Decision Maker requests a party to provide a response to a Claim or to furnish additional supporting data, such party shall respond, within ten days after receipt of the request, and shall either (1) provide a

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response on the requested supporting data, (2) advise the Initial Decision Maker when the response or supporting data will be furnished, or (3) advise the Initial Decision Maker that no supporting data will be furnished. Upon receipt of the response or supporting data, if any, the Initial Decision Maker will either reject or approve the Claim in whole or in part.

§ 15.2.5 The Initial Decision Maker will render an initial decision approving or rejecting the Claim, or indicating that the Initial Decision Maker is unable to resolve the Claim. This initial decision shall (1) be in writing; (2) state the reasons therefor; and (3) notify the parties and the Architect, if the Architect is not serving as the Initial Decision Maker, of any change in the Contract Sum or Contract Time or both. The initial decision shall be final and binding on the parties but subject to mediation and, if the parties fail to resolve their dispute through mediation, to binding dispute resolution.

§ 15.2.6 Either party may file for mediation of an initial decision at any time, subject to the terms of Section 15.2.6.1.

§ 15.2.6.1 Either party may, within 30 days from the date of receipt of an initial decision, demand in writing that the other party file for mediation. If such a demand is made and the party receiving the demand fails to file for mediation within 30 days after receipt thereof, then both parties waive their rights to mediate or pursue binding dispute resolution proceedings with respect to the initial decision.

§ 15.2.7 In the event of a Claim against the Contractor, the Owner may, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim. If the Claim relates to a possibility of a Contractor's default, the Owner may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

§ 15.2.8 If a Claim relates to or is the subject of a mechanic's lien, the party asserting such Claim may proceed in accordance with applicable law to comply with the lien notice or filing deadlines.

§ 15.3 Mediation

§ 15.3.1 Claims, disputes, or other matters in controversy arising out of or related to the Contract, except those waived as provided for in Sections 9.10.4, 9.10.5, and 15.1.7, shall be subject to mediation as a condition precedent to binding dispute resolution.

§ 15.3.2 The parties shall endeavor to resolve their Claims by mediation which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Mediation Procedures in effect on the date of the Agreement. A request for mediation shall be made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the mediation. The request may be made concurrently with the filing of binding dispute resolution proceedings but, in such event, mediation shall proceed in advance of binding dispute resolution proceedings, which shall be stayed pending mediation for a period of 60 days from the date of filing, unless stayed for a longer period by agreement of the parties or court order. If an arbitration is stayed pursuant to this Section 15.3.2, the parties may nonetheless proceed to the selection of the arbitrator(s) and agree upon a schedule for later proceedings.

§ 15.3.3 Either party may, within 30 days from the date that mediation has been concluded without resolution of the dispute or 60 days after mediation has been demanded without resolution of the dispute, demand in writing that the other party file for binding dispute resolution. If such a demand is made and the party receiving the demand fails to file for binding dispute resolution within 60 days after receipt thereof, then both parties waive their rights to binding dispute resolution proceedings with respect to the initial decision.

§ 15.3.4 The parties shall share the mediator's fee and any filing fees equally. The mediation shall be held in the place where the Project is located, unless another location is mutually agreed upon. Agreements reached in mediation shall be enforceable as settlement agreements in any court having jurisdiction thereof.

§ 15.4 Arbitration

§ 15.4.1 If the parties have selected arbitration as the method for binding dispute resolution in the Agreement, any Claim subject to, but not resolved by, mediation shall be subject to arbitration which, unless the parties mutually agree otherwise, shall be administered by the American Arbitration Association in accordance with its Construction Industry Arbitration Rules in effect on the date of the Agreement. The Arbitration shall be conducted in the place where the Project is located, unless another location is mutually agreed upon. A demand for arbitration shall be

made in writing, delivered to the other party to the Contract, and filed with the person or entity administering the arbitration. The party filing a notice of demand for arbitration must assert in the demand all Claims then known to that party on which arbitration is permitted to be demanded.

§ 15.4.1.1 A demand for arbitration shall be made no earlier than concurrently with the filing of a request for mediation, but in no event shall it be made after the date when the institution of legal or equitable proceedings based on the Claim would be barred by the applicable statute of limitations. For statute of limitations purposes, receipt of a written demand for arbitration by the person or entity administering the arbitration shall constitute the institution of legal or equitable proceedings based on the Claim.

§ 15.4.2 The award rendered by the arbitrator or arbitrators shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof.

§ 15.4.3 The foregoing agreement to arbitrate and other agreements to arbitrate with an additional person or entity duly consented to by parties to the Agreement, shall be specifically enforceable under applicable law in any court having jurisdiction thereof.

§ 15.4.4 Consolidation or Joinder

§ 15.4.4.1 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may consolidate an arbitration conducted under this Agreement with any other arbitration to which it is a party provided that (1) the arbitration agreement governing the other arbitration permits consolidation, (2) the arbitrations to be consolidated substantially involve common questions of law or fact, and (3) the arbitrations employ materially similar procedural rules and methods for selecting arbitrator(s).

§ 15.4.4.2 Subject to the rules of the American Arbitration Association or other applicable arbitration rules, either party may include by joinder persons or entities substantially involved in a common question of law or fact whose presence is required if complete relief is to be accorded in arbitration, provided that the party sought to be joined consents in writing to such joinder. Consent to arbitration involving an additional person or entity shall not constitute consent to arbitration of any claim, dispute or other matter in question not described in the written consent.

§ 15.4.4.3 The Owner and Contractor grant to any person or entity made a party to an arbitration conducted under this Section 15.4, whether by joinder or consolidation, the same rights of joinder and consolidation as those of the Owner and Contractor under this Agreement.

ARTICLE 16 Federal Provisions

§ 16.1 Prohibition Against the Use of Lead Based Paint

The Contractor shall comply with the prohibition against the use of lead based paint contained in the Lead Based Paint Poisoning Act (42 USC 4821-4846) as implemented by 24 CFR Part 35.

§ 16.2 Federal Health, Safety, and Accident Prevention

The Contractor shall ensure that no laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his/her health and/or safety as determined under the construction safety and health standards promulgated by the Secretary of Labor by regulation. The Contractor shall comply with §5.07 and with the regulations and standards issued by the Secretary of Labor at 29 CFR Parts 1904 and 1926 Failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 9154, 83 Stat. 96), 40 USC 3701 to 3708 et seq.

§ 16.3 Clean Air and Water Applicable to Contracts in Excess Of \$150,000

The Contractor shall comply with all requirements of the United States Environmental Protection Agency (EPA) 40 CFR Part 15, 42 USC 7401, 33 USC 1251 et seq., the Federal Water Pollution Control Act 33 USC 1281 et seq., and Executive Order 11738.

§ 16.4 Energy Efficiency

The Contractor shall comply with all standards and policies relating to energy efficiency which are contained in the energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163) in Washington State and the Federal Energy Policy and Conservation Act (42 USC 6201).

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§ 16.5 Labor Standards; Davis-Bacon and Related Acts, if Applicable

The Contractor shall comply with all provisions of the Davis-Bacon Act and Related Acts such as the Housing Act of 1937, the National Housing Act, the Housing and Community Development Act of 1974, the National Affordable Housing Act of 1990, Equal Employment Opportunity 41 CFR Part 60 or similar related Acts for Federal Labor Standards for this Contract. The Contractor is responsible for the full compliance of all employers, including the Contractor, Subcontractors, and all the Lower-Tier Subcontractors with the Labor Standards Provisions applicable to this Project.

§ 16.6 Interest of Member of Congress

No member of or delegate to the Congress of the United States of America shall be admitted to any share or part of this Contract or to any benefit to arise therefrom, but this provision shall not be construed to extend to this Contract if made with a corporation for its general benefit. Copeland Anti-Kickback Act 40 USC 3145.

§ 16.7 Interest of Members, Officers, Commissioners and Employees, or Former Members, Officers and Employees

No member, officer, or employee of King County Housing Authority, no member of the Governing body of the locality in which the project is situated, no member of the governing body in which the Owner was activated, and no other public official or such who exercises any functions or responsibilities with respect to the project, shall, during his or her tenure, or for one year thereafter, have any interest, direct or indirect, in this contract or the proceeds thereof.

§ 16.8 Organization Conflicts of Interest

- The Contractor warrants that to the best of its knowledge and belief and except as otherwise disclosed, .1 it does not have any organizational conflict of interest which is defined as a situation in which the nature of the work under this Contract and the Contractor's organizational, financial, contractual or other interests are such as:
 - **.a** Award of the Contract may result in an unfair competitive advantage; or
 - **.b** The Contractor's objectivity in performing the Contract Work may be impaired.
- .2 The Contractor agrees that if after award they discover an organizational conflict of interest with respect to this Contract, they shall make an immediate and full disclosure in writing to the Contracting Officer, which shall include a description of the action, which the Contractor has taken or intend to take to eliminate or neutralize the conflict. The Owner may, however, terminate the Contract if it deems the action to be in the best interest of the Owner.
- In the event the Contractor was aware of an organizational conflict of interest before the award of this .3 Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.
- In the event the Contractor was aware of an organizational conflict of interest before the award of this .4 Contract and intentionally did not disclose the conflict to the Contracting Officer, the Owner may terminate the Contract for default.

§ 16.9 Lobbying

Contractor shall be in compliance with the Byrd Anti-Lobbying Amendment 31 USC 3145.

§ 17 Audits and Inspections

The records and documents with respect to all matters covered by this Contract shall be subject at all times to inspection, review or audit by the Owner or any other government agency so authorized by law during the performance of this Contract. The Owner shall have the right to an annual audit of the Contractor's financial statement and condition.

- The Contractor shall maintain accounts and records in accordance with State Auditor's procedures, .1 including personnel, property, financial and programmatic records which sufficiently and properly reflect all direct and indirect costs of any nature expended and services performed in the performance of this Contract and other such records as may be deemed necessary by the Owner to ensure proper accounting for all funds contributed by the Owner to the performance of this Contract and compliance with this Contract.
- The Owner shall maintain these records for a period of six (6) years after termination hereof unless .2 permission to destroy them in granted by the office of the archivist in accordance with RCW Chapter 40.14

§ 18 Section 3 – Instructions, Requirements and Income Guidelines, if Applicable

Contractor shall comply with all requirements of the Section 3 Program for economic opportunities providing to the greatest extent possible, job training employment and contract opportunities for low or very low income residents including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and YouthBuild participants, as defined at 24 CFR Part 75 ("Section 3 Regulations") per the Exhibit, as designated in AIA Contract Document A101-2007, Section 8.6.1.

§ 18.1 The work to be performed under this contract is subject to the requirements of the Section 3 Regulations. The purpose of Section 3 is to ensure that employment and other economic opportunities generated by HUD assistance or HUD-assisted projects covered by Section 3, shall, to the greatest extent feasible, be directed to low- and very low-income persons, including persons who are recipients of HUD assistance for housing, with preference for both targeted workers living in the service area or neighborhood of the Development and YouthBuild participants.

§ 18.2 The parties to this contract agree to comply with HUD's Section 3 Regulations. As evidenced by their execution of this contract, the parties to this contract certify that they are under no contractual or other impediment that would prevent them from complying with the Section 3 Regulations.

§ 18.3 The Contractor agrees to send to each labor organization or representative of workers with which the Contractor has a collective bargaining agreement or other understanding, if any, a notice advising the labor organization or workers' representative of the Contractor's commitments under this Section 3 clause, and will post copies of the notice in conspicuous places at the work site where both employees and applicants for training and employment positions can see the notice. The notice shall describe the Section 3 preference, shall set forth minimum number and job titles subject to hire, availability of apprenticeship and training positions, the qualifications for each; and the name and location of the person(s) taking applications for each of the positions; and the anticipated date the work shall begin.

§ 18.4 The Contractor agrees to include this Section 3 clause in every subcontract subject to compliance with Section 3 Regulations, and agrees to take appropriate action, as provided in an applicable provision of the subcontract or in this Section 3 clause, upon a finding that the subcontractor is in violation of the Section 3 Regulations. The Contractor will not subcontract with any subcontractor where the Contractor has notice or knowledge that the subcontractor has been found in violation of the Section 3 Regulations.

§ 18.5 The Contractor will certify that any vacant employment positions, including training positions, that are filled (1) after the Contractor is selected but before the contract is executed, and (2) with persons other than those to whom Section 3 Regulations require employment opportunities to be directed, were not filled to circumvent the Contractor's obligations under Section 3 Regulations.

§ 18.6 Noncompliance with Section 3 Regulations may result in sanctions, termination of this contract for default, and debarment or suspension from future HUD assisted contracts.

§ 18.7 The Contractor shall submit to the Owner a Section 3 Work Plan, including hiring and subcontracting activities, and an Individual Certification Form for each person that is assigned to the project, prior to the contract execution. The Contractor will submit to the Owner with each Application for Payment the Section 3 Labor Hours Benchmark Status Report and any Individual Certification Form(s) for persons not initially assigned to the project prior to the contract execution. Noncompliance, incorrect, or missing documents will result in progress payments being withheld until all issues are resolved to the satisfaction of the Owner.

§ 18.8 Section 3 Employment and Training. Without limiting Contractor's obligation to comply with Section 3 Regulations, Contractor specifically agrees to use best efforts to provide employment and training opportunities to Section 3 workers in the following order of priority:

- .1 To residents of the KCHA development where the work is being performed;
- .2 To residents of other KCHA developments or for residents of Section 8-assisted housing managed by KCHA;
- .3 To participants in YouthBuild programs; and
- .4 To low- and very low-income persons residing within the Puget Sound Area.

§ 18.8 Section 3 Contracting. Without limiting Contractor's obligation to comply with Section 3 Regulations,

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Contractor specifically agrees to use best efforts to award contracts and subcontracts to business concerns that provide economic opportunities to Section 3 workers in the following order of priority:

- .1 To Section 3 business concerns that provide economic opportunities for KCHA residents of the development where the work is being performed;
- .2 To Section 3 business concerns that provide economic opportunities for KCHA residents of other KCHA developments or Section–8 assisted housing managed by KCHA;
- .3 To YouthBuild programs; and
- .4 To Section 3 business concerns that provide economic opportunities to Section 3 workers residing within the Puget Sound Area.

§ 19 OTHER INFORMATIVE INFORMATION

§ 19.1 Certificate of Endorsement, Final Project Schedule, Subcontractor List, Performance and Payment Bond and Section 3 Plan must be received and approved by the Owner prior to the issuance of the Notice to Proceed.





PERFORMANCE AND PAYMENT BOND INSTRUCTIONS

DIRECTIONS FOR PREPARATION OF PERFORMANCE AND PAYMENT BOND

- 1. Individual sureties, partnerships, or corporations not in the surety business will not be acceptable.
- 2. The name of the Principal shall be shown exactly as it appears in the Contract.
- 3. The penal sum shall not be less than required by the Specifications.
- 4. If the Principals are partners or joint venturers, each member shall execute the bond as an individual and state is place of residence.
- 5. If the principal is a corporation, the bond shall be executed under its corporate seal. If the corporation has no corporate seal, it shall so state and affix a scroll or adhesive seal following the corporate name.
- 6. The official character and authority of the person(s) executing the bond for the Principal, if a corporation, shall be certified by the Secretary or Assistant Secretary thereof under the corporate seal, or copies attached to such records of the corporation as will evidence the official character and authority of the officer signing, duly certified by the Secretary or Assistant Secretary, under the corporate seal, to be true copies.
- 7. The current power-of-attorney of the person signing for the surety company must be attached to the bond.
- 8. The date of the bond must not be prior to the date of the Contract.
- 9. The following information must be placed on the bond by the surety company:
 - a. The Rate of premium in dollars per thousand; and
 - b. The total dollar amount of premium charged
- 10. The signature of a witness shall appear in the appropriate place attending to the signature of each party of the bond.
- 11. Type or print the name underneath each signature appearing on the bond
- 12. An executed copy of the bond must be attached to each copy of the Contract (original counterpart) intended for signing.



PERFORMANCE AND PAYMENT BOND

KNOW ALL MEN BY THESE PRESENT, That we the Undersigned,

as PRINCIPAL, and _____

as

SURETY are held and bound unto the **KING COUNTY HOUSING AUTHORITY** of Seattle, Washington, hereinafter called the Public Housing Authority in the penal sum of:

WHEREAS the Principal has entered into a certain Contract with the Public Housing Authority dated

_____, 20____, a copy of which is hereto attached and made a part hereof.

NOW, THEREFORE, the condition of this obligation is such that if the Principal shall in all respects fully perform the Contract and all duly authorized modifications thereof, during its original term and any extensions thereof that may be granted and during any guaranty period for which the Contract provides, and if the Principal shall fully satisfy all claims arising out of the prosecution of the Work under the contract and shall fully indemnify the Public Housing Authority for all expenses which it may incur by reason of such claims, including its attorney's fees and court costs, and if the Principal shall make full payment to all persons supplying labor, services, materials, or equipment in the prosecution of the Work under the contract, in default of which such persons shall have a direct right of action hereupon, and if the Principal shall pay or cause to be paid all sales and use taxes payable as a result of the performance of the Contract as well as payment of gasoline and special motor fuels taxes in the performance of the Contract, then this obligation shall be void; otherwise, it shall remain in full force and effect. No modification of the Contract or extension of the term thereof, nor any forbearance on the part of the Public Housing Authority, shall in any way release the Principal or the Surety from liability hereunder. Notice to the Surety of any such modification, extension, or forbearance is hereby waived.

IN WITNESS WHEREOF, the aforesaid Principal and Surety have executed this instrument and affixed their seals hereto, this ______ day of ______ 20___.

WITNESS:		
	(Individual Principal)	(Seal)
	(Business Address)	(Seal)
	(Individual Principal)	(Seal)
	(Business Address)	(500)
ATTEST:		
	(Corporate Principal)	
	(Business Address)	
	(B y)	(Corporate Seal)
	(Title)	
ATTEST:		
	(Surety)	
	(Business Address)	
	(By)	(Corporate Seal)
	(Title)	· · · /
The Rate of Premium on this Bond is \$ The Total Amount of Premium Charges is \$	per thousand.	

(The above is to be filled in by Surety Company. * Power of Attorney of person signing for Surety Company must be attached.)



CERTIFICATE AS TO CORPORATE PRINCIPAL

CERTIFICATE AS TO CORPORATE PRINCIPAL

I,	certify that I am the
President / Vice President / Secretary /	of the Entity: Corporation
/LLC /	_, named as the Principal in the aforegoing bond. The authorized
Official of the named bonding agent who	signed the said bond on behalf of the Principal, hereby certifies
that said bond was fully signed, sealed a	and attested for and in behalf of said Entity by authority of its
Governing body.	
Named Bonding Agent:	

Affix Corporate Seal / Authorized Signature:



KING COUNTY HOUSING AUTHORITY INSURANCE REQUIREMENTS

INSTRUCTIONS / ENDORSEMENT INFORMATION FOR COMPLETING, EXECUTING, AND SUBMITTING EVIDENCE OF INSURANCE

A. INSURED CONTRACTOR:

- 1. In order to reduce problems and time delays in providing evidence of insurance to the King County Housing Authority you are requested to give your insurance agent or broker a copy of *the Insurance Requirements Sheet along with the Instructions/Endorsement Form(s) for Completing, Executing, and Submitting Evidence of Insurance.*
- 2. If the agreement requires Workers' Compensation coverage and you have been authorized by the State to self-insure Workers' Compensation, then a copy of the certificate from the State authorizing self-insurance for Workers' Compensation shall meet the requirements for Workers' Compensation insurance covering activities within the State.
- 3. All questions relating to insurance should be directed to the department or office responsible for your contract, lease, permit, or other agreement.

B. INSURANCE AGENT OR BROKER:

- 1. The appropriate Endorsement Form shall include:
 - a. King County Housing Authority as Additional Insured
 - b. State that the Contractor's Insurance Is Primary
 - c. State King County Housing Authority's Insurance Is Non-Contributory In Claims Settlement Funding

PLEASE NOTE: King County Housing Authority WILL NOT ACCEPT Certificates of Insurance Alone.

- 2. More than one insurance policy may be required to comply with the insurance requirements. Endorsement forms appropriate to your insured's agreement, contract, lease or permit are included. In each instance, King County Housing Authority shall be named as additionally insured on the appropriate endorsement forms.
- 3. You shall have an authorized representative of the insurance company forward the completed endorsement forms with his/her phone number noted at the bottom of the page, to King County Housing Authority.
- 4. The name of the Insurance Company underwriting the coverage and its address shall be noted on the endorsement form.
- 5. The "General description of agreement(s) and/or activity(s) insured" shall include reference to the activity and/or to either the specific King County Housing Authority's:
 - a. Project or Site Name
 - b. Contract Number
 - c. Lease Number
 - d. Permit Number
 - e. Construction Approval Number



- 6. The Coverage and limits for each type of insurance are specified on the insurance requirements sheet. When coverage is on a scheduled basis, then a separate sheet is to be attached to the endorsement listing such scheduled locations, vehicles, etc. so covered.
- 7. Endorsements to excess policies will be required when primary insurance is insufficient in complying with King County Housing Authority's requirements.
- 8. If there is insufficient space on the form to note pertinent information, such as inclusions, exclusions or specific provisions, etc., a separate sheet may be attached.
- 9. When additional sheets are attached, change the number of pages at the bottom of the form to so indicate.
- 10. Completed Endorsement(s) including cancellation notices and questions relating to the required insurance are to be directed to:

KING COUNTY HOUSING AUTHORITY ATTN: CAPITAL CONSTRUCTION DEPARTMENT 700 ANDOVER PARK WEST, SUITE C TUKWILA, WA 98188

- 11. Improperly Completed Endorsements will be returned to your insured for correction by an authorized representative of the insurance company.
- 12. For extensions or renewals on insurance policies which have King County Housing Authority Endorsement Form(s) attached, the Housing Authority will accept a copy of the endorsement to extend the period of coverage as evidence of continued coverage.
- C. MINIMUM LIMITS:
 - 1. REFER TO "Insurance Requirements" attached.



INSURANCE REQUIREMENTS FOR BUILDING TRADE CONTRACTORS (with Construction Risks)

The Awarded Contractor shall comply as follows:

Contractor shall procure and maintain, at their expense, for the duration of the contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

<u>THE KING COUNTY HOUSING AUTHORITY (AUTHORITY) SHALL BE NAMED AS</u> <u>ADDITIONALLY INSURED ON THE APPROPRIATE ENDORSEMENT FORMS</u>.

MINIMUM SCOPE OF INSURANCE:

Coverage shall be at least as broad as:

- 1. Insurance Services Office Commercial General Liability coverage including Products / Completed Operations.
- 2. Insurance Services Office covering any Owned, Leased, Hired and Non-owned, and Automobile Liability.
- 3. Workers' Compensation insurance as required by State law and Employers Liability coverage.
- 4. Builders Risk (Property / Course of Construction insurance covering for all risks of loss for all projects in excess of \$250,000.)
- 5. Professional Liability / Errors and Omission (when applicable).

MINIMUM LIMITS OF INSURANCE:

Contractor shall maintain limits no less than:

- 1. General Liability: \$1,000,000 per occurrence, \$2,000,000 general aggregate, including \$1,000,000 Products / Completed Operations for bodily injury, personal injury and property damage. If Commercial General Liability Insurance or other form with a general aggregate limit is used, either the general aggregate limit shall apply separately to this project / location or the general aggregate limit shall be twice the required occurrence limit.
- 2. Automobile Liability: \$1,000,000 per accident for bodily injury / property damage.
- 3. Employer's Liability / Washington Stop Gap: \$1,000,000 per accident for bodily injury, sickness or disease.
- 4. Builder Risk (Property) / Course of Construction: Completed value of the project.
- 5. Professional Liability / Errors and Omissions: \$1,000,000 per claim; \$2,000,000 aggregate (when applicable).

DEDUCTIBLES AND SELF-INSURED RETENTIONS:

Any deductibles or self-insured retentions must be declared to and approved by the Authority. At the option of the Authority, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the Authority, its successors and assigns, director, officiens, officials, employees, agents, partners and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the Authority guaranteeing payment of losses and related investigations, claim administration and defense expenses.



NOTE: If this contract deals with hazardous materials or activities (i.e. lead based paint, asbestos, armed security guards) additional provisions covering those exposures must be included in order to protect the Authority's interests.

OTHER INSURANCE PROVISIONS:

General Liability and Automobile Liability Policies are to contain, or be endorsed to contain, the following provisions:

- 1. The Authority, its successors and assigns, director, officers, officials, employees, agents, partners, and volunteers are to be covered as additional insureds with respect to (i) general liability arising out of work done or operations performed by or on behalf of the contractor, including materials, parts or equipment furnished in respect to such work or operations. The endorsement(s) effectuating the foregoing additional insured coverage shall be ISO form CG 20 10 11 85, or CG 20 10 10 01 issued concurrently with CG 20 37 10 01, or their equivalent¹ as long as it provides additional insured coverage, and not limited to the minimum acceptable as required herein, for completed operations; (ii) automobile liability arising out of vehicles owned, leased, hired, or borrowed by or on behalf of the Contractor; (iii) any insurance written on a claims made basis, shall have a retroactive date that coincides with, or precedes, the commencement of any work under this contract. Evidence of such coverage shall be maintained for a minimum of six (6) years beyond the expiration of the project and if a Claims Made policy is not renewed or replaced, then evidence of an extended reporting period of six (6) years shall be provided.
- 2. For any claims related to this project, the Contractor's insurance coverage shall be primary insurance as respects the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers. Any insurance or self-insurance maintained or expired by the Authority, its officers, officials, employees, or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- 3. The Contractor on behalf of itself and its liability insurance carriers release and waive any claims and subrogation rights against The Authority, its successors and assigns, director, officers, officials, employees, agents, partners, and volunteers. The Contractor agrees that they will cause its insurance carriers to include in its policies such a clause or endorsement. If extra cost shall be charged therefore, the Contractor shall pay the same.
- 4. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled or materially changed, except after thirty (30) days / (ten (10) days for nonpayment of premium) without prior written notice given to the Authority through certified mail, with return receipt requested.
- 5. Maintenance of the proper insurance for the duration of the contract is a material element of the contract. Material changes in the required coverage or cancellation of the coverage shall constitute a material breach of the contract.

Builders Risk / Course of Construction Policies shall contain the following provisions:

- 1. The Authority and its insurers shall be named as loss payees.
- 2. The insurer shall waive all rights of subrogation against the Authority, its successors and assigns, director, officers, officials, employees, agents, partners and volunteers.

¹ "Equivalent" means that any endorsements provided must have the equivalent coverage of the listed endorsements. NOTE: This may cost the Contract extra money to get this coverage. **Bidder's Insurance Requirements** Page 4 of 5



ACCEPTABILITY OF INSURERS:

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A-:VII. Contractors must provide written verification of their insurer's rating.

VERIFICATION OF COVERAGE:

Contractor shall furnish the Authority with **original certificates** and **amendatory endorsements** affecting coverage required by this clause. The endorsements should be on forms provided by the Authority or on other than the Authority's forms, provided those endorsements conform fully to the requirements. All certificates and endorsements are to be received and approved by the Authority before work commences in sufficient time to permit Contractor to remedy any deficiencies. The Authority reserves the right to require complete, certified copies of all required insurance policies, or pertinent parts thereof, including endorsements affecting the coverage required by these specifications at any time.

SUBCONTRACTORS:

- 1. Subcontractor shall include the Contractor as additional insured under their policies. All coverages for subcontractors shall be subject to all of the requirements stated herein.
- 2. Contractor shall be responsible for the adequacy of required coverages for subcontractors, and compile related certificates of insurance and endorsements evidencing subcontractors' compliance.

INDEMNIFICATION AND HOLD HARMLESS:

- 1. To the fullest extent permitted by law the Contractor hereby agrees to indemnify and hold harmless the KCHA, its successors and assigns, directors, officials, officers and employees, volunteers, partners and agents (all foregoing singly and collectively "Indemnitees"), from and against any and all claims losses, harm, costs, liabilities, damages and expenses including, but not limited to, reasonable attorneys' fees arising or resulting from the performance of the Work, or the acts or omissions of the Contractor its successors and assigns, employees, subcontractors or anyone acting on the Contractor's behalf in connection with this Contract or its performance; PROVIDED, however, that the Contractor shall not be required to so indemnify any such Indemnitees; PROVIDED FURTHER that if such damages are caused by or result from the concurrent negligence of the Indemnitees and the Contractor or anyone acting on the Contractor's behalf, then the Contractor's indemnity hereunder shall be limited to the extent of the negligence of the Contractor, its successors and assigns, et al.
- 2. The foregoing indemnity is specifically and expressly intended to constitute waiver of the Contractor's immunity under Washington's Industrial Act, RCW Title 51, and that this waiver has been specifically negotiated and agreed upon by the parties.
- 3. The Contractor hereby agrees to require all its subcontractors or anyone acting under its direction or control or on its behalf in connection with or incidental to the performance of this Contract to execute an indemnity clause identical to the preceding clause, specifically naming KCHA as Indemnitee, and failure to do so shall constitute a material breach of this Contract by the Contractor.



SITE SPECIFIC SAFETY PLAN REQUIREMENTS

Following is a list of the elements that are typically addressed in a construction site specific safety plan. A site specific safety plan will be one of the required post-selection documents be submitted by the contractor selected through this bid solicitation.

In addition to the typical elements of a construction safety plan that addresses the contractor, the Governor of the State of Washington has instituted additional proclamations and rules surrounding the COVID-19 virus that must be included. Because COVID-19 is a pandemic which is evolving rapidly, when warranted, it is expected that these project-specific safety plan(s) will be updated by the Contractor to reflect the most current rules in effect.

NOTE: For any project that requires entry into occupied units, the Contractor's Site Specific Safety Plan **will be required** to describe the specific construction techniques and use of PPE designed planned to keep the tenants and the workers safe from COVID-19 virus transmission.

The selected contractor with responsible for obtaining similar plans from all subcontractors and for the supervision and enforcement of safety requirements on the site. The contractor's Site-Specific Safety Plan will be submitted to KCHA before any work can begin. The Plan will need to address the following:

- 1. An initial job/job-site safety orientation and a schedule of weekly safety meetings that show employees and subcontractors what they need to know to perform their job assignments safely.
- 2. Details how and when to report on-the-job injuries.
- 3. Identifies on-site available 1st Aid / CPR trained personnel, readily accessible first-aid on the job site and/or access to the nearest clinic or hospital from the job site.
- 4. Identifies what to do in an emergency, including how to exit the workplace.
- 5. Lists the required personal protective equipment (PPE) and describes the proper use and care of the PPE.
- 6. Details the on-site Haz-Com Program that identifies hazardous materials (Asbestos, Lead) or chemicals including instruction about the safe use and storage.
- 7. Designates an on-site representative responsible for job-site Safety.
- 8. Designates who is responsible for performing and recording regular periodic site reviews, and inspections for your employees and subcontractors.
- 9. Describes programs related to housekeeping and jobsite safety.
- 10. Outlines the job-site specific fall protection plan.
- 11. Describes electrical and/or power generation controls on-site.
- 12. Has provisions for trenching /excavations and/or confined space entry.



- 13. Outlines procedures that comply with the governor's requirements as stated in his COVID-19 Phase 2 Construction Restart Job Site Work Plan; including the following:
 - a. General site COVID-19 measures.
 - b. Occupied unit entry (what workers PPE workers will be required to wear, sanitization protocols, etc. that will keep both the worker and the tenant safe).
 - c. Occupied unit exit (what workers will be required to do upon exiting an occupied unit that will keep both the work and the tenant safe).
 - d. Procedures workers will have to follow if entering multiple units within a day (with emphasis on PPE protocols between units if worker(s) are entering multiple units one after the other).



SUB-CONTRACTOR VERIFICATION FORM

It is the responsibility of the General Contractor to obtain and verify the Subcontractor's Information described below. For compliance, the General Contractor must submit a copy of the Subcontractor Verification form prior to the sub starting work. A copy of the Affidavit of Intent form must accompany the applicable Certified Payroll. Without these forms, the Pay Application maybe withheld.

KCHA will review subcontractors' qualifications, safety record, and the history of compliance (including subcontractor's principals working under another company name) with labor and other state and federal laws. Based on this review, KCHA reserves the right at its sole discretion to reject subcontractors and require the selected General Contractor to replace or substitute a subcontractor with one acceptable to KCHA.

Dhygical Address	
Physical Address:	
Contact Name and Title	
Email Address:	Phone No.:
WA State Contractor's License:	UBI Number:
Employment Security Number:	L&I's Workers' Comp. Acct. ID:
Federal Tax ID Number:	DUNS Number:
SUB-CONTRACTOR IS A(N): Individua	l Partnership* Corporation** – in state of
* If Partnership, provid	le Full Name(s) and Address(es) of all parties
** If your company is "also know	n as (AKA)" or "doing business as (DBA) list all names
	CATION RATE (EMR): 2019; 2020; 2021; EMR stated, showing complete worksheet calculations).
Sub-Contractor is not presently debarred, suspende excluded from covered transactions by any federal	ed, proposed for debarment, declared ineligible, or voluntarily department or agency:
NOTE : The penalty for making false statement in	offer is prescribed in 18 U.S.C. 1001.
SUBMITTED ON : Day of	, 20
Signature of General Contractor	Name of General Contractor (Print)
Title of General Contractor (Print)	Date

U.S. Department of Housing and Urban Development Office of Public and Indian Housing

OMB Approval No. 2577-0157 (Exp. 01/31/2017)

CONTRACT DOCUMENT C.7

Applicant Name

Program/Activity Receiving Federal Grant Funding

The undersigned certifies, to the best of his or her knowledge and belief, that:

(1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

(2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions. (3) The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all sub recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

I hereby certify that all the information stated herein, as well as any information provided in the accompaniment herewith, is true and accurate. **Warning:** HUD will prosecute false claims and statements. Conviction may result in criminal and/or civil penalties. (18 U.S.C. 1001, 1010, 1012; 31 U.S.C. 3729, 3802)

Name of Authorized Official	Title	
Signature		Date (mm/dd/yyyy)

DISCLOSURE OF LOBBYING ACTIVITIES Approved by OME					
Complete this form to disclose lobbying activities pursuant to 31 U.S.C. 1352			0348-0046		
(See reverse for put			CONTRACT DOCUMENT C.8		
1. Type of Federal Action: 2. Status of Federal		3. Report Type:			
	ffer/application	a. initial filing			
b. grant b. initial	award	b. material change			
c. cooperative agreement c. post-	award	For Material Change Only:			
d. loan		year	quarter		
e. loan guarantee		date of las	t report		
f. loan insurance					
4. Name and Address of Reporting Entity:	5. If Reporting En and Address of	-	ubawardee, Enter Name		
Congressional District, <i>if known</i> : 6. Federal Department/Agency:	-	District, <i>if known</i> : m Name/Description			
	CFDA Number, A	if applicable:	- 		
8. Federal Action Number, if known:	9. Award Amount, if known:				
	\$				
10. a. Name and Address of Lobbying Registrant (<i>if individual, last name, first name, MI</i>):	b. Individuals Per different from N (last name, first	lo. 10a)	(including address if		
11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact	Signature:				
upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This	Print Name:				
information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and	Title:				
not more than \$100,000 for each such failure.	Telephone No.:		Date:		
Federal Use Only:			Authorized for Local Reproduction		
			Standard Form LLL (Rev. 7-97)		

INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
- 2. Identify the status of the covered Federal action.
- 3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
- 4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
- 5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
- 6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizationallevel below agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
- 8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
- 10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.
 - (b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
- 11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.



CERTIFICATION OF COMPLIANCE WITH WASHINGTON STATE WAGE PAYMENT STATUTES

The Bidder hereby certifies that, within the three year period immediately preceding the bid solicitation date of _______, that the Bidder is not a "willful" violator, as defined in RCW 49.48.082, of any provision of chapters 49.46, 49.48 or 49.52 RCW, as determined by a final and binding citation and notice of assessment issued by the WA State Department of Labor & Industries of through a civil judgement entered by a court of limited or general jurisdiction.

I certify under penalty of perjury under the laws of the State of Washington that the forgoing is true and correct.

Bidder		
Signature of Authorized Officia	*	
Printed name		
Title		
Date	City	State
Check one: Individual Partnership	Joint Venture 🗆 Cor	poration 🗆
State of Incorporation, or if not	a corporation, State wh	nere business entity was formed:

If a co-partnership, give company name under which business is transacted:

^{*}If a corporation, this Certification must be executed in the corporate name by the president or vice president (Or any other coporate officer accompanied by evidence of authority to sign). If a co-partnership, Certification must be executed by a partner.

CONTRACT DOCUMENTS C.10

County Housing Authority Vendor Set-up Form (Alternative W-9)

FOR KCHA US	E ONLY Sub	mitted by:		Vendor Number	:	Date:
Name (as sho	wn on vour i	income tax return):				
Nume (us sho	wit on your					
Business nam	e/disregard	entity name, if differen t	t from above:			
Check approp	riate box for	r Federal tax classificatio	on (required):			
Individual		S Corporation		Trust/Estate	Other (see instru	ictions)
C Corpora	tion	Partnership		Exempt Payee		
Contraction Reprovements and the	ability Comp	oany (LLC). Enter the tax	classification (C=	C corporation, S=	S Corporation,	>>
	the second s	treet, and apt. or suite n	no.): City	, State, and Zip C	ode: Telep	hone:
Remit to add	ress (if differ	ent from above):	City	, State, and Zip C	code: Email	:
Taxpayer Ider	ntification N	umber (TIN)			PF	OVIDE ONE ONLY
		priate box. The TIN provide	d must match the n	ame given on	SSN:	
the "Name" lin	e to avoid ba	ckup withholding. For indiv s your employer identificat	viduals, this is your :	social security num	ber EIN:	
Terms of Pay	ment	Net 30	🗌 Net 10th	of Month	Other	
		Net 10	Due upor	receipt		
*Section-3:		o *Questions can be dire	ected to KCHA Se	ction 3 Coordinat	or 206-826-5335	
WMBE:		Y OWNED (MBE OR		OWNED (WBE)	O Not Applica	ble
	MWBE)	I OWNED (MDE ON	o menual	•	0	
	1. White	American	4. Hispan	ic American	NONE OF TH	HE ABOVE (NEC)
	2. Black	American	5. Asian F	acific American	Other	
	3. Native		6. Hasidid	Jew		a - 0
	5. Native	American				
Certification						
Under the penalt				· · · · · · · · · · · · · · · · · · ·	we have to be issued to ma) a	ad
		this form is my correct taxpayer				ternal Revenue Service (IRS) that I am
2. Lam no	to backup with	holding as a result of a failure to	report all interest or d	vidends, or c) the IRS I	has notified me that I am no I	onger subject to backup withholding, and
		her U.S. person. See instruction		, , ,		
Certification Inst	ructions: You m	ust cross out item 2 above if you	have been notified by	the IRS that you are c	urrently subject to backup with	thholding because you have failed to
report all interest	t and dividends of	on your tax return. For real esta	te transactions, item 2	does not apply. For mo enerally, payments to	ortgage interest paid, acquisit other than interest and divide	ion of abandonment of secured property, ends, you are not required to sign the
certification, but	vou must provid	e vour correct TIN.				
The IRS doe not r	equire your con	sent to any provision of this doo	cument other than the	certification required to	o avoid backup withholding.	
SIGN HEF		ure of U.S. Person:				ate:
Return com	pleted form	to King County Housing	g Authority, 600 A	ndover Park We	st, Tukwila, WA 9818	8
See instruct	ions below o	or refer to the IRS instruc	ctions at <u>www.irs.</u>	gov for details or	n completing this form	
General Instruct	tions:	rundato a vondor account with	the King County House	ng Authority This form	n meets the Federal requirem	ents to request a taxpayer identification
number (TIN), re	equest certain ce	ertifications and claims for exem	nption, as well as the Ki	ng County Housing Aut	thority (KCHA) requirements	for vendor establishment.
Complete form		You are a U.S. person (includir				
	2.	You are a vendor that provide	s goods or services to K	CHA; AND		
	3.	You will receive payment from	KCHA			



NAL AFFIDAVIT OF AMOUNTS PAI

Every Sub-Contract Participant must Complete and Sign a Final Affidavit Form, regardless of tier. Every Prime Participant must Complete and Sign, Certifying the Statement from the Sub-Contract Participant. Notary must witness and verify Prime Participant.						
PROJECT NAME / TITLE:				CONTRACT	NUMBER:	
SCOPE OF WORK:						
PRIME CONTRACTOR / CONSULTANT: ADDRESS-CITY-STATE-ZIP:				UBI NU	MBER:	
CONTRACT TYPE:	TION ARCHIT	ECT / ENGINEERING	CONSULTANT	OTHER:		
ORIGINAL CONTRACT AMOUNT:		\$				
TOTAL # OF AMENDMENTS: (_)	\$				
TOTAL # OF CHANGE ORDERS: (_)	\$				
FINAL CONTRACT AMOUNT	:	\$	0.00			
SUB - CONTRACT PARTICIPANT :						
CHECK BOX THAT APPLIES:	SUB-CONTRACTOR		SUB - CONSULTANT	MATERIAL	S SUPPLIER	
ENTER NAME AND ADDRESS OF COMPANY	UBI NUMBER	DATE WORK COMPLETED	SUB-CONTRACT AMOUNT	AMOUNTS IN RETAINAGE TO DATE	AMOUNT PAID TO DATE	
	. >					
I, the Undersigned, do hereby certify that all taxes and other fees imposed upon my company, by Labor & Industries, Employment Security, and Department of Revenue have been paid and all accounts are in good standing . I further certify that all employees and Sub-Contractors, Sub-Consultants and Materials Suppliers who have worked under my company on this project have been paid in full , except for any retainage that is agreed upon under a Sub-Contract. I acknowledge receipt of payment as indicated in this form.						
NAME OF COMPANY:						
PRINT NAME OF AUTHORIZED PERSON	TITLE		SIGNATURE		DATE	
The Sub-Contractor Participant above has signed upon receipt for amounts paid. I, the undersigned, do hereby certify that in connection with all work on the project for which this statement is submitted, by the Sub-Contract Participant named above has been paid the amount shown for work completed or portions thereof listed.						
PRIME PARTICIPANT Signature / Title:				DATE:		
Subscribed and Sworn before me this $_$	day of		20			
(PRINT NAME)	Notary Public i	n and for the Sta	ate of Washington.			
Residing at:					otary Seal	
Signature:						



SECTION 3 – INDIVIDUAL CERTIFICATION FORM

Section 3 of the Housing and Urban Development (HUD) Act of 1968, as amended, requires that Housing Authorities and agencies receiving HUD funding, to the greatest extent feasible, provide economic opportunities to low-income persons. **Information provided on this form shall remain confidential and be used for reporting purposes only.** *Print all information*

NAME:						
ADDRESS:						
EMAIL ADDRESS:		PHON	IE NUMBER:			
HIRE DATE:		POSI	TION TITLE:			
EMPLOYER / COMPANY NA	ME:					
1. I am a resident in a KCHA	Property.		_		Yes	No
Property Name:						
2. I am currently in KCHA's	Section 8 Prog	gram.	_		Yes	No
3. I am currently a participan	t in a HUD Yo	uthBuild Prog	ram.		Yes	No
 a. I live in KITSAP COUN My TOTAL income for Below or Equal to b. I live in KING or SNOI 	the past 12 mo \$57,650 HOMISH CO	UNTY and	Greater than	\$57,65	0	
My TOTAL income for	-				0	
 Below or Equal to c. I live in PIERCE COUN My TOTAL income for Below or Equal to 	NTY and the past 12 mo		_ Greater than eck appropriate _ Greater than	box)		
d. I live in SKAGIT COU My TOTAL income for		nthe was (ch	ack appropriate	hor)		
Below or Equal to	\$48,250			\$48,25	0	
e. I live in THURSTON C My TOTAL income for		nths was: (<i>che</i>	eck appropriate	box)		
Below or Equal to	\$56,500		Greater than	\$56,50	0	



- f. I live in COUNTY and My TOTAL income for the past 12 months was: \$
- In the past five years, I have been a resident of public housing or Section 8 assisted housing managed by KCHA; a resident of other public housing projects or Section 8 assisted housing, or a _____ Yes ____ No YouthBuild participant.

I hereby certify under the **penalty of perjury** that the information above is true and correct.

Signature

Date

If submitting for a new hire, attach completed forms to Labor Hours Benchmark Status Report and submit to project manager. If submitting for Section 3 business qualification, attach to Section 3 Business Certification Form. For questions, please contact KCHA by email at section3@kcha.org.



SECTION 3 – INDIVIDUAL CERTIFICATION FORM FAQ's

Question: Answer:	What is this form? This form is a Section 3 Certification Form that will be used to determine if an individual is a Section 3 worker as defined by HUD 24 CFR 75 and the KCHA.
Question:	Who fills out this form?
Answer:	Any individual who is paid in full or part with HUD funds. (If unsure if position is HUD funded, please contact Contract administrator.)
Question:	What will this form be used for?
Answer:	This form will be used for the purpose of determining Section 3 eligibility and for statistical purposes.
Question: Answer:	Who collects this form and where does it go? Any employer or contractor that has a contract with the KCHA that is HUD funded will collect this data from any employee who was employed within the last five years. Once the data is collected the original copy will come to KCHA.
Question:	Who is a KCHA Resident?
Answer:	Someone who lives in a KCHA Housing Development whose name is listed on a current lease.
Question:	How long should I go back to calculate my income?
Answer:	Individuals should calculate back 12 months from their date of hire.
Question: Answer:	What if I don't live in King County? Individuals who do not reside in King County may still be eligible to be certified by KCHA as a Section 3 resident.

If you have more specific questions, please contact KCHA at section3@kcha.org.



SECTION 3 – LABOR HOURS BENCHMARK REPORT - INSTRUCTIONS

Complete the Labor Hours Benchmark Status Report as indicated below and return the completed form <u>along</u> with the pay application(s) for the same period.

Return the Labor Hours Benchmark Status Report and pay application to:

King County Housing Authority 700 Andover Park West Tukwila, WA 98188

Attn:

Email:

REPORT LINES:

- 1) Name of the project as it appears on the Contract
- 2) Company Name
- 3) Name of the person filling out the Labor Hours Benchmark Status Report
- 4) Phone number of the person filling out the Labor Hours Benchmark Status Report
- 5) Email address of the person filling out the Labor Hours Benchmark Status Report
- 6) Contract number as it appears on the Contract
- 7) Contract Award date (date of Letter of Award)
- 8) Reporting Period should be the same as the pay application period
- 9) Total hours worked by all workers on the project this will be everyone that is listed on the certified payrolls during Reporting Period.
- 10) Total hours worked on the project by Section 3 workers during the Reporting Period.

A Section 3 worker is identified as:

- a. The worker's income for the previous or annualized calendar year is below the income limit established by HUD; or
- b. Is employed by a Section 3 business concern; or
- c. Is a YouthBuild participant.

These will be the workers identified as Section 3 employees upon the submittal of their Section 3 Individual Certification Form at the beginning of the project OR when they were brought onto the project. A copy of these forms should be available from your company's payroll office. Copies can also be obtained by submitting a request to <u>section3@kcha.org</u>. Please include your company's name, project name and contact information.

11) Total hours worked on the project by Targeted Section 3 workers during the Reporting Period.

A Targeted Section 3 worker is identified as:

- a. Employed by a Section 3 business concern; or
- b. Is a resident of public housing or Section 8 assisted housing; or
- c. Resides within one mile of the project site.

These workers will be identified as Targeted Section 3 employees upon the submittal of their Section 3 Individual Certification Form at the beginning of the project OR when they were brought onto the project. A copy of these forms should be available from your company's payroll office. Copies can also be obtained by submitting a request to <u>section3@kcha.org</u>. Please include your company's name, project name and contact information.

See sample scenarios on pgs. 3 & 4



SECTION 3 – LABOR HOURS BENCHMARK REPORT

GENERAL INFORMATION
1) PROJECT NAME:
2) COMPANY NAME:
3) CONTACT PERSON:
4) CONTACT PHONE NO.:
5) CONTACT EMAIL ADDRESS:
6) CONTRACT NO.: 7) CONTRACT AWARD DATE:
SECTION 3 LABOR HOUR BENCHMARKS
8) REPORTING PERIOD: FROM: TO:
9) TOTAL LABOR HOURS FOR ALL WORKERS ON THE PROJECT DURING THE REPORTING PERIOD:
10) TOTAL LABOR HOURS FOR ALL SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD:
11) TOTAL LABOR HOURS FOR ALL <u>TARGETED</u> SECTION 3 WORKERS ON THE PROJECT DURING THE REPORTING PERIOD:
I certify that the information in this report is true and correct to the best of my knowledge:
SIGNATURE
PRINT NAME DATE
To be completed by KCHA Staff RECEIVED BY:
SIGNATURE TITLE

PRINT NAME

DATE



SCENARIO 1:

A crew of 5 none of whom self-certified as a Section 3 worker.

Reporting period is from June 1 to June 30.

The total <u>hours</u> that the crew worked on the project during the reporting period totaled 1,000.

SECTION 3 LABOR HOUR BENCHMARKS

8)	REPORTING PERIOD: FROM: <u>6-1-22</u>	TO:	6-30-22	
9)	TOTAL LABOR HOURS FOR ALL WORKE REPORTING PERIOD:	ERS ON THE PROJECT DURI	NG THE	1000
10)	TOTAL LABOR HOURS FOR ALL SECTIO DURING THE REPORTING PERIOD:	ON 3 WORKERS ON THE PRO	OJECT	0
11)	TOTAL LABOR HOURS FOR ALL <u>TARGE</u> PROJECT DURING THE REPORTING PERIO	CTED SECTION 3 WORKERS OD:	S ON THE	0
SCENARIO 2: A crew of 5, two of whom self-certified as Section 3 workers. Reporting period is from June 1 to June 30. The total hours that the <u>crew</u> worked on the project during the reporting period totaled 1,000. The total hours of the <u>two that self-certified as Section 3 workers</u> during the reporting period totaled 80. SECTION 3 LABOR HOUR BENCHMARKS				
8)	REPORTING PERIOD: FROM: <u>6-1-22</u>	TO:	6-30-22	
9)	TOTAL LABOR HOURS FOR ALL WORKE REPORTING PERIOD:	ERS ON THE PROJECT DURI	NG THE	1000
10)	TOTAL LABOR HOURS FOR ALL SECTIO DURING THE REPORTING PERIOD:	ON 3 WORKERS ON THE PRO	OJECT	80
11)	TOTAL LABOR HOURS FOR ALL <u>TARGE</u> PROJECT DURING THE REPORTING PERI		S ON THE	0



SCENARIO 3:

A crew of 5, one of whom self-certified as a Section 3 worker and the other as a Targeted Section 3 worker. Reporting period is from June 1 to June 30.

The total hours that the <u>crew</u> worked on the project during the reporting period totaled 1,000.

The total hours of the one that self-certified as a Section 3 worker during the reporting period totaled 40.

The total hours of the one that self-certified as a Targeted Section 3 worker during the reporting period totaled 40.

SECTION 3 LABOR HOUR BENCHMARKS

8)	REPORTING PERIOD: FRO	DM: <u>6</u>	5-1-22	TO: <u>6-30-22</u>	
9)	TOTAL LABOR HOURS FOR REPORTING PERIOD:	ALL W	WORKERS ON THE PROJ	ECT DURING THE	1000
10)	TOTAL LABOR HOURS FOR DURING THE REPORTING P			N THE PROJECT	40
11)	TOTAL LABOR HOURS FOR PROJECT DURING THE REPO	ALL <u>T</u> ORTINC	TARGETED SECTION 3 G PERIOD:	WORKERS ON THE	40
SCENARIO 4: A crew of 5, (in this scenario, it does <u>not</u> matter if there are Section 3 workers or not) Reporting period is from June 1 to June 30. The total hours that the <u>crew</u> worked on the project during the reporting period totaled <u>ZERO</u> . SECTION 3 LABOR HOUR BENCHMARKS					
8)	REPORTING PERIOD: FRO	OM: <u>6</u>	5-1-22	TO: <u>6-30-22</u>	
9)	TOTAL LABOR HOURS FOR REPORTING PERIOD:	ALL W	WORKERS ON THE PROJ	ECT DURING THE	0
10)	TOTAL LABOR HOURS FOR DURING THE REPORTING P			N THE PROJECT	0
11)	TOTAL LABOR HOURS FOR PROJECT DURING THE REPO			WORKERS ON THE	0

YES, A LABOR HOUR BENCH MARK FORM HAS TO BE SUBMITTED EVEN IF NO WORK IS PERFORMED **BUT** THE GC/SUB (ALL TIERS) HAVE NOT FINISHED THE PROJECT.



D - SECTION

THIRD PARTY REPORTS

There are no reports for this project.



E - SECTION

DRAWINGS & SPECIFICATIONS

- E.1 Scope of Work and Technical Specifications
- E.2 Drawings (if not included see attached)



SCOPE OF WORK & TECHNICAL SPECIFICATIONS

SCOPE OF WORK

DIVISION 1 – GENERAL REQUIREMENTS

- 01 10 00 Summary
- 01 26 00 Contract Modification Procedures
- 01 29 00 Payment Procedures
- 01 31 00 Project Management & Coordination
- 01 32 00 Construction Progress Documentation
- 01 33 00 Submittal Procedures
- 01 40 00 Quality Requirements
- 01 50 00 Temporary Facilities & Controls
- 01 60 00 Product Requirements
- 01 73 00 Execution
- 01 73 29 Cutting and Patching
- 01 74 19 Construction Waste Management and Disposal
- 01 77 00 Closeout Procedures
- 01 78 23 Operation and Maintenance Data
- 01 78 39 Project Record Documents
- ****** KCHA Pay Application Form (sample)
- ****** KCHA Substitute Request Form (sample)

DIVISION 02 – EXISTING CONDITIONS

02 41 00 Selective Demolition

DIVISION 03 – CONCRETE

- 03 30 00 Cast-In-Place Concrete
- **DIVISION 05 METALS**
 - 05 05 13 Shop Applied Coatings
 - 05 50 00 Metal Fabrications
 - 05 52 00 Metal Railings

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

- 06 10 00 Rough Carpentry
- 06 16 00 Sheathing

DIVISION 07 – THERMAL MOISTURE CONTROL

- 07 12 13 Built-up Modified Asphalt Sheet Waterproofing
- 07 25 00 Weather Resistant Barrier
- 07 31 00 Laminated Fiberglass Shingles
- 07 46 46 Fiber Cement Siding and Trim
- 07 62 00 Sheet Metal Flashing and Trim
- 07 92 00 Joint Sealants

DIVISION 08 – OPENINGS

- 08 16 13 Fiberglass Entry Doors
- 08 71 00 Door Hardware

DIVISION 09 – FINISHES

09 91 00 Painting



DIVISION 31 – EARTHWORK

- 31 10 00 Site Preparation
- 31 22 00 Earth Moving

31 25 00 Erosion and Sedimentation Control

DIVISION 32 – EXTERIOR IMPROVEMENTS

- 32 12 16 Asphalt Paving
- 32 17 23 Pavement Markings
- 32 30 00 Site Improvements
- 32 93 00 Planting
- 33 40 00 Storm Drainage Systems



A0.0

LIST OF DRAWINGS

C1.0	SITE PLAN AND NOTES
C2.0	EXISTING CONDITIONS
C3.0	T.E.S.C. AND DEMO PLAN
C4.0	SITE PLAN
C5.0	GRADING AND DRAINAGE PLAN
C6.0	GRADING AND DRAINAGE PLAN
C7.0	DETAILS
A1.0	KEY PLAN
AD2.1	DEMO FLOOR PLANS
AD3.1	DEMO ELEVATIONS
A2.1	FIRST FLOOR PLANS
A2.2	SECOND FLOOR PLANS
A3.1	ELEVATIONS
A4.1	ENLARGED PLANS & ELEVATIONS
A4.2	RAMP PLAN AND ELEVATION
A5.0	SHED ASSEMBLY DISAGRAMS
A5.1	SHED DETAILS
A5.2	SHED DETAILS
A5.3	TYPE 2 SHED DETAILS
A5.4	TYPE 3 SHED DETAILS
A6.1	EXTERIOR DETAILS
A6.2	EXTERIOR DETAILS

COVER SHEET

TABLE OF CONTENTS – SCOPE OF WORK

- **1.0 Project Summary**
- 2.0 **Project Administration Requirements**
 - A. Pre-construction
 - **B.** Construction Administration
 - C. Closeout
- **3.0** General Requirements
 - A. Acknowledgement
 - **B.** Staffing and Experience
 - C. Quality Assurance and Quality Control
 - **D.** Inspection of Work

E. Site Requirements

- 1. Work Hours
- 2. Restrictions
- 3. Contractor Responsibilities
- F. Project Phasing

4.0 Safety, Protection and Restoration

- A. Safety
- **B.** Protection
- C. Restoration
- **D.** Hazardous Material

5.0 Divisions (See Specification Sections for complete details)

Division 1 General Conditions

- A. Site Staging and Deliveries
- B. Temporary Facilities

Division 2 Site Construction

- A. Selective Demolition
- B. Existing Utilities

Division 3 Concrete

- A. Concrete Demolition
- B. Concrete

Division 5 Metals

- A. Shop Applied Coating
- B. Metal Fabrications
- C. Metal Railings

Division 6 Wood and Plastics

- A. Rough Carpentry
- B. Sheathing

Division 7 Thermal and Moisture Protection

- A. Built-Up Modified Asphalt Sheet Waterproofing
- B. Weather Resistant Barrier
- C. Laminated Fiberglass Shingles
- D. Fiber Cement Siding
- E. Sheet Metal Flashing and Trim
- F. Joint Sealants

Division 8 Openings

- A. Fiberglass Storage Doors
- B. Door Hardware

Division 9 Finishes

A. Painting

Division 31 Earthwork

- A. Site Preparation
- B. Earth Moving
- C. Erosion and Sedimentation Control

Division 32 Exterior Improvements

- A. Asphalt Paving
- B. Pavement Markings
- C. Planting
- D. Storm Drainage Systems

SECTION 001010 SCOPE OF WORK

1.0 PROJECT SUMMARY

Northwood Square was built in 1978, with an envelope upgrade completed in 2018. The resident population is a diverse population of families and children which will remain occupied throughout construction.

Storage Shed: Work will include demolishing 24 existing storage shed closets at the unit, including removal of roofing, siding, sheathing (T&G), and cutting concrete slabs. The new structure will include a new foundation, 2x4 wall framing, 2x6 rafters, roof shingles, exterior and interior sheathing, WRB, fiber cement siding, and trim. The new storage units will be framed with all associated hardware and PT materials as noted on plans to accommodate a 3'-0" x 6'-8" exterior door and hardware. The existing fire extinguisher cabinets will be salvaged and incorporated into the new wall framing. They will be recessed as noted on plan page A6.1.

Site Work: Work includes the removal of selected sidewalks, asphalt pavement, and landscaping to incorporate a new drainage system that will connect to the existing storm drain system. Any existing piping will be removed to complete the installation of new. The Contractor will be responsible for removing and reinstalling existing chain link fencing, wood fencing or privacy panels to complete all associated work. The new storm drain connection at the backside of Building B will include protection the existing DHP's and assuring they are in full operation after work is complete. Any excavation performed during the day will be covered and secured at the end of each work day.

An ADA ramp, including handrails, will be installed at the south elevation of Building B (Manager's Office). A new ramp and stairs will be installed at the North Elevation laundry room. Each location will include removing and replacing existing siding, relocating the current recessed fire extinguisher cabinets, and infill framing as needed. The contractor will be responsible for all forms, rebar, and vertical sheet waterproofing applied between existing buildings and new concrete. Refer to detail page A6.2.

The selective asphalt areas noted on the plans will be removed and replaced to allow the connection of the new storm lines into the main storm drain connection as well as room to form new sidewalk areas. Pressure washing of the entire parking will be completed before the seal coat of the entire parking lot. Parking lot painting will include re-striping, numbering, painting of ADA markings curb painting, and no parking stripping at the North end of Building B. The existing ADA signage will be salvage and re installed using Ulti-Mate perforated steel square sign posts. Posts will be set in concrete a minimum of 24" and 5' to center of sign. The existing wheel stops located outside the basketball court will be removed for seal coating and reinstalled and painted to match the current condition. The Contractor must submit a phasing plan for KCHA approval and integrate it into the master schedule prior to work commencing. KCHA expects the site and landscaping to be fully restored at the completion of the project.

2.0 PROJECT ADMINISTRATION REQUIREMENTS

A. Pre-Construction Administration

BEFORE commencement of work begins on-site the Contractor will provide the Owner the following items:

1. Project Master Schedule

- a. Completed in Microsoft Project, Primavera or similar.
- b. Must be cost loaded to reflect Schedule of Values items.
- c. Project phasing shall be integrated into master schedule.

d. Shall include the following project milestones:

1)	Contract start date (CS)	TBD
2)	Notice to Proceed (NTP)	TBD
3)	Construction Duration (CD) Start Date/Stop Date	TBD - TBD
4)	Substantial Completion (SC)	TBD
5)	Physical Completion (PC) and Warranty Start Date of Entire Project	TBD
6)	Contract Completion (CC) of Entire Project	TBD

*The dates listed above are estimated milestone dates, provided to the Contractor for incorporation and inclusion in the negotiated final project Critical Path Method (CPM) schedule. These estimated dates may change. Such changes, if any, shall not result in an automatic extension of the Final Completion date. The Contractor shall make reasonable flexibility in the schedule to accommodate any such date changes in order to accomplish the interim milestone dates (NTP, CD Start/Stop, SC, PC and CC).

2. Schedule of Values (SOV)

- a. Each item must correlate to the project schedule.
- b. Schedule of Values to contain a two and one-half (2.5%) percent line item for the closeout documents.
- c. Schedule of Values to reflect detailed tasks by labor and material.
- d. Contractor to include a separate line item for each item listed below:
 - 1) Overhead and Profit.
 - 2) General Conditions.
 - 3) Material and Labor for each task or based on subcontracted work. This will allow KCHA to pay for materials purchased at the beginning of the project or during the course of construction (once KCHA has established that the Contractor has ordered, has been invoiced, and has a suitable location to store materials. See Contract documents for requirements.)
 - 4) Mobilization.
 - 5) COVID Monitoring/Cost.

3. Submittal Schedule

All submittals to King County Housing Authority (KCHA) prior to start of related work.

- a. The Contractor shall provide and manage a schedule of all submittals required on the project as listed in each specification section.
- b. Submittals will be processed with enough time for the Owner to reasonably provide feedback fourteen (14) calendar days prior to materials being delivered to the site.
- c. Any material submitted that is not listed in the project specifications will need to be submitted with a Substitution Request Form for review.
- **4. Site Specific Safety Plan**: The Site Specific Plan should be submitted for review then kept on site during construction. Verify regular safety meetings are being held per proposed plan.
- **5. Phasing and Coordination Plan** including the following (*See section 3 item I, regarding Phasing*):
 - a. Resident access plan for entry and exiting of apartment units.
 - b. Resident parking plan for proposed parking lot closings and openings.
- 6. Subcontractor List with the names <u>all</u> subcontractors including contact information.

*NOTE: All items stated above must be submitted and approved BEFORE Contractor commences work.

B. Construction Administration

1. Master Schedule: The Contractor shall maintain (update and track) the provided project master schedule using CPM for the project. This work will progress and be reflected with the

project SOV. Project phasing shall be reflected in the master schedule. The Contractor is responsible for all scheduling and coordination between all trades and any other subcontractors working for the Contractor.

- 2. Two (2) Week Look-Ahead: The Contractor will provide weekly a two (2) week "look-ahead" schedule updating the relationship of this report with master project schedule. This shall be provided for review and be a topic of discussion during weekly site meetings. This schedule will be specific to the individual tasks as well as to identify work requiring site notifications and coordination.
- **3. Daily Reports:** Contractor to provide copies of daily site reports on a weekly basis. The daily report will describe daily man power, weather conditions, work in progress, delays and issues. Daily report format shall be submitted (during pre-construction phase) to Owner for review.
- **4. Meeting Minutes:** Contractor to manage and provide copies of meeting minutes/notes for all pre-construction, coordination, safety and weekly Owner/Architect/Contractor (OAC) meetings. Meeting minutes format to be submitted (during pre-construction phase) to Owner for review.
- **5.** Notices: It is the Contractor's responsibility to plan, coordinate and inform KCHA of work which shall require notice. Failure to provide adequate notice that results in a delay will be fully on the Contractor.
 - a. Unit Entry: The Contractor must coordinate unit entry with the Owner such that all required Notices-to-Tenants can be posted forty-eight (48) business hours PRIOR to Entry.
 - b. Shut Downs: Contractor will provide proper notification (minimum of seventy-two (72) business hours to the Owner and (minimum of forty-eight (48) business hours to the tenants.
 - c. General Notices: The Contractor shall provide notice to Owner related to project start, potential impacts on tenants' accessibility and moving if items which could interfere with construction progress.
- 6. As-Builts: The Contractor will be responsible to assess and record the existing conditions of any damaged or non-working items, such as existing electrical and mechanical equipment, pipe, utilities, concrete, asphalt etc., and prior to removal of work. Contractor is responsible to restore or replace all finishes that become damaged as a result of work being performed. Contractor is not responsible for repairs of existing damage. As-Built drawings shall be current-to-date and will be reviewed on-site prior to each pay application.
- 7. Certified Payrolls: All Contractor employees and all sub-contractor employees will need to know their trade classification and pay rate.
 - a. Owner will be conducting on-site wage interviews verifying job classification and wage rate.
 - b. HUD Non-Routine Maintenance Wage Rates apply to this project and must be posted onsite at all times.
- 8. Punch List: When the Contractor has deemed the project as substantially complete, meaning all base bid work is complete and conforms to requirements of the specifications and quality standards established through the mockups and as stated in the contract documents, the Contractor and a KCHA representative shall thoroughly inspect and list work that is non-conforming that the Contractor must complete prior to final payment. The work may include incomplete or incorrect installations or incidental damage to existing finishes, material, and structures. The list shall be provided to the Owner for their review and approval. All punch list items are expected to be finished and accepted by the physical completion date.

C. Closeout Administration

1. O&M Manuals: One (1) hard copy and one (1) electronic copy of the Operation and Maintenance (O&M) manual for all major materials and equipment shall be supplied by the Contractor to the Owner upon Project completion and prior to request for final payment.

- a. Electronic copy to be submitted for approval prior to submitting hard copy.
- b. O&M manual will include all warranties associated with the Work.
- c. O&M manual will include relevant data associated with warranties and works such as
 - 1) Name of installer with all contact information.
 - 2) Name of manufacturer and location material was purchased with all contact information.
- d. All O&M manuals are subject to Owner approval
- 2. Final As-Built Drawings: Upon substantial completion of the Project, the marked-up set of site documents shall be converted into as-built drawings and submitted to the Owner for review and approval.
- **3. Permits Finals:** Upon physical completion of the Project, all completed permits and permit drawings to be submitted to Owner and City of Auburn with final sign offs.
- 4. Master Keys and Access Cards: Upon physical completion of the Project, Contractor shall return all master keys and access cards, signing off a Key Return Form.
- 5. **Punch List(s):** Upon physical completion of the Project, all lists shall be completed and signed off by the Owner.

3.0 GENERAL REQUIREMENTS

A. Acknowledgements

- 1. By signing the contract, the Contractor acknowledges that they have reviewed and can fully implement all administrative and physical aspects of the work as described in the project scope of work, specifications and drawings. The Contractor also acknowledges that they have completed an extensive site walk of the site and accepts the site conditions.
- 2. The Contractor will be responsible to assess and record the existing conditions of any damaged items, such as exterior siding, existing pipe, and utilities, prior to removal of work. KCHA's assumption is that all items are in good working order. Contractor is responsible to restore or replace all finishes that become damaged as a result of work being performed. Contractor is not responsible for repairs of existing damage.
- 3. The Contractor will provide all materials, fasteners, shoring, staging, labor, equipment, and expertise necessary to provide a quality "Turnkey" project, complete with all elements of the work, safely, on time, and within budget.
- 4. The Owner does not foresee any change orders for work resulting in site conditions that were clearly visible and present during the Mandatory Pre-bid Site Visit. By submitting a bid the Contractor acknowledges any labor, material and equipment required for a "Turnkey" project not specifically covered in the plans and specifications has been included in their base bid.
- 5. The Contractor's Superintendent or Foreman will be assigned a construction master key and will be held responsible for all costs related to the re-keying should the key be lost or stolen. If the master key is lost or stolen the Contractor will be responsible for re-keying all related locksets to a new keying system by the <u>end of the day</u> the issue is reported.
- 6. The Contactor has and will continue to field verify all visible existing site conditions, adjacent conditions/components and quantities. If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the Drawings.
- 7. Any questions occurring during bidding or construction shall be resolved by <u>direction in</u> <u>writing</u> from Owner. Any issues not so resolved or any conflicts between the scope of work, specifications and plans, shall result with the Contractor bidding, furnishing and installing the most stringent condition. No exceptions. Contractor must submit an RFI if a conflict exists between the scope of work, specifications and plans.

- 8. It is incumbent on the Contractor to inform the Owner of any conflicts between manufacturers' requirements and the provided plans and specifications through the RFI process and prior to submitting a bid.
- 9. Contractor must demonstrate a comprehensive understanding that all work described in the project documents is all-inclusive and results in a complete system. Contractor to provide all materials, unless stated otherwise. All tasks must be complete with uniform fit, function, form, style and type.
- 10. Permits: The Owner will obtain the building permit; all other permits (including city of jurisdiction permits or agency of jurisdiction permits) are the Contractor's responsibility. Contractor shall keep permits posted and onsite at all times
- 11. Plans & Specifications: The Contractor shall keep all associated permits and the approved permit plan set on site at all times. The Contractor will keep and maintain, on-site, a separate but complete set of construction drawings and specifications for markups and daily use.
- 12. Any damage caused by construction related activities (i.e. demolition, laydown areas) to existing physical assets to remain will be the Contractor's responsibility to correct at no cost to the Owner.

B. Staffing and Experience Requirements

- 1. The Contractor is expected to be on-site working each consecutive weekday unless directed otherwise by Owner.
- 2. A qualified and experienced full time site Superintendent or Foreman will be on site at all times.
- 3. The Contractor shall employ a sufficient number of workers and equipment to perform the Work in a diligent and expeditious manner. KCHA expects the Contractor to adequately staff the project to maintain the schedule, including reallocating and increasing staffing as needed to correct any slippage in the schedule.
- 4. Contractor and sub-contractor employees shall perform all work in a professional manner. All tasks must be complete with uniform fit, function, form, style and type.
- 5. All trades are to have a minimum of three (3) years of experience in their given trade.
- 6. Tradesmen must have the proper certification to perform work or to operate specific equipment that requires certifications and/or licenses.
- 7. The Contractor shall immediately remove from the site any of its employees or its subcontractors' employees, as the Owner shall deem incompetent, careless, insubordinate or otherwise disruptive to the progression of the project.

C. Quality Assurance / Quality Control

- 1. All Work shall be performed using new materials, installed plumb, level, true to the line, free of defects, and completed in a professional workmanlike manner to provide a complete, safe, and operable "Turnkey" installation.
- 2. The Contractor will follow all manufacturers' requirements and recommendations for the installation of all products to maintain the integrity of all manufacturer's warranties.
- 3. Mockups: The Contractor will provide all mockups, within his base scope, required for the project as listed in each specification section. Mockups and color samples will be produced with enough time for the Owner to reasonably provide feedback one (1) week prior to these components being staged and implemented on site. Mockups will set expectations of quality expected for the project.
- 4. Quality Assurance/ Quality Control: The Contactor will provide ongoing QA/QC at each step of work and take corrective measures prior to the next element of work being performed. This

will include, but is not limited to, sequencing partial punches and substantial completions throughout the project.

- 5. Contractor responsible for subcontractor's quality of workmanship and materials, completion of scope, and scheduling on site.
- 6. It is incumbent on the Contractor to inform the Owner of any conflicts between manufacturers' requirements and the provided plans and specifications through the RFI process and prior to submitting a bid.

D. Inspection of Work

- 1. Code Compliance: All work will be code compliant and without defect for all materials and applications at time of KCHA punch inspection.
- 2. Owner Progress Inspections: All work is subject to Owner inspection and approval and is the responsibility of the Contractor until it is turned over to Owner.
- 3. Jurisdiction Inspections (as required per permit): The Contractor is required to attend all inspections, and inform KCHA representative within 48 hours prior to such scheduled inspections. Contractor is responsible for any costs associated with re-inspections for work not approved by the Authority Having Jurisdiction.

E. Site Requirements

- 1. All communication and coordination will be with Owner representatives only.
- 2. On-site tenant support services (i.e. laundry, maintenance/staff facilities) must be fully accessible and operational at all times.
- 3. Work shall be coordinated not to interrupt services (i.e. garbage, mail, EMS, etc.).
- 4. Emergency and tenant access must be maintained at all times.
- 5. The Contractor is required to maintain the cleanliness of the work-site; there will be daily inspections by the Owner to verify cleanliness, safety and tenant access. The Contractor will be responsible for cleanup and housekeeping of work limits, staging areas, and Contractor's parking areas by the end of each business day. Contractor to secure all equipment, materials, and tools, ensure that unfinished work areas are protected and secure prior to leaving for the weekend.
- 6. No noise prior to 8:00am but layout and work setup can begin at 7:30am unless permission is granted by the Owner's Representative.
- 7. If Unit access is required, Contractor will not enter units before 8:00AM, once proper notification has been posted by KCHA.
- 8. The Contractor is responsible for providing sanitary services, potable water and field office spaces for their agents. No public bathroom, drinkable water or office space is available onsite, for the Contractor or its agents.
- 9. The Contractor must read and comply with all safety requirements as stated in Section 4 A.

10. <u>The Contractor is responsible for all necessary locates (both private and public), grading,</u> <u>and staking as required.</u>

11. See Division 1 related to staging and deliveries.

F. General Restrictions

- 1. No parking in fire lanes. Fire lanes will be uninhibited at all times for first responder and tenant service access, unless otherwise approved by Fire Marshal.
- 2. No smoking on site by any Contractor or any of the Contractor's representatives (i.e. subcontractors, suppliers, consultants, etc.).

- 3. No washing out of any materials on site will be allowed. All contaminated or silt laden water must be contained and responsibly disposed of offsite.
- 4. No loud or offensive music is permitted.
- 5. No dumping on site. Contractor will not be allowed to use Owner's waste facilities.
- 6.

G. Work Hours

- 1. Work to be performed during normal hours of operation from <u>8:00am to 4:30 pm</u>. There will be no work on weekends (unless prior approval has been granted by Owner). Owner does not pay overtime.
- 2. There will be no work on Owner holidays. Contractor to verify with Owner's Representative if there are any Owner holidays occurring during the duration of the project.

H. Contractor's Responsibilities

- 1. Contractor will be responsible to provide power for all work described. Contractor will not be allowed to use any on-site power unless prior approval has been granted by the Owner.
- 2. Water use available with previous approval from Owner. Contractor must obtain approval of Owner for water usage forty-eight (48) hours prior to use.
- 3. The Contractor is responsible for City of Auburn hauling route, plans, and street use permits.

I. Project Phasing

- 1. This project will directly impact thirty (24) residential dwelling units and approximately sixty (35) parking stalls. The intent of the phasing plan is to make available as many parking spaces as possible at all times and provide the least disruption to tenant unit and site access. The Owner anticipates several phases for this project due to limited parking and site access.
- 2. The Owner's expectation is not to open up "Vast" areas of the project for prolong periods of time or shutting down public areas to accommodate staging, stock piling, mobilization or for convenience of construction. Contractor must realize and accept that this project is being conducted in a fully occupied housing development and all that it encompasses (families, elderly, children out of school, daily traffic from families coming and going at all times during the day). The Owner is not only concerned about scope, schedule and budget, but the impact on its residents. The Contractor must take these considerations in to their phasing and sequencing accordingly. The Contractor must review their risk factors to accommodate these considerations in their bid.

4.0 SAFETY, PROTECTION & RESTORATION

A. Safety

- 1. Contractor shall provide and have on site at all times a site specific safety plan.
- 2. Comply with all safety and health codes within Local, State and Federal jurisdictions.
- 3. All work must operate within OSHA and State-equivalent (WISHA) standards and requirements.
- 4. The Contractor shall conduct weekly safety meetings; the minutes from these meeting are to be available to the Owner upon request. A schedule for safety meetings will be provided with the Contractor's submittal of the Safety Plan. Confirmation that the weekly safety meeting did take place and the topic of the safety meeting will be stated in the weekly site meeting minutes.
- 5. All workers on-site will wear high visibility vests or apparel with company logo or name that clearly identifies the workers.

- 6. All workers must be equipped with proper personal protective equipment (PPE) and be wearing it when appropriate or required while they are on-site (i.e. hardhat, safety glasses, ear plugs and fall arrest etc.).
- 7. Contractor to keep walkways free of debris, materials, tools and equipment at all times. Access must be maintained for residents at all times. If access is blocked or limited, the Contractor must ensure that a safe, alternative route can be maintained and accessed by residents.
- 8. The Contractor will be diligent in ensuring that all safety measures are performed at all times for all aspects of work being performed.
- 9. Work Areas shall be cordoned off with safety fencing and/or caution tape while work is in progress.
- 10. Contractor is responsible for safety and security of work areas affected by work and will provide temporary guardrails, temporary cover and/or locks for openings. Contractor's main focus is the safety of his work force and the safety of KCHA's residents and staff.
- 11. The Contractor is responsible to secure all materials and equipment to prevent damage and to also take precautions to prevent theft of their personal items.

B. Protection

- 1. Protect existing roofing, concrete walkways, paving, landscaping and all other finished surfaces which are to remain.
- 2. Contractor will provide protection at landscape areas where material laydown, storage, construction trailers or equipment are stored.
- 3. Contractor is responsible to protect and maintain all areas within the project work limits including, but not limited to, landscaping, hardscapes, exterior amenities, existing improvements, and adjacent/abutting finishes to remain (roofing, soffits, gutters etc.). If necessary, Contractor shall coordinate with Owner for removal / relocation of tenant property on front and back patios.
- 4. See individual scope item related to protection Dust and debris control Best Management Practices (BMPs) will be applied daily in all work areas (i.e. use of tarps, water truck, street sweeper etc.).
- 5. All construction activities, including staging and traffic area, shall be prohibited within five (5') feet of drip lines of protected trees.

C. Restoration

- 1. Contractor responsible for restoration of any damage due to construction related activities. Contractor is advised to do a pre-construction walk and do an assessment with KCHA site personal prior to construction to note and document existing conditions.
- 2. Contractor will restore all landscape impacted by construction to existing pre-construction conditions.
- 3. Contractor to restore all lawn areas.
 - a. Grass areas that are identified for replacement or are damaged from construction activities are to be conditioned with new 3-way topsoil mix to a depth of (4") inches and tilled in to existing soils.
 - b. The Contractor shall roll to consolidate topsoil for areas to be sodded leaving surface smooth, uniform, firm against deep foot printing, and with a fine loose texture.
- 4. Planted areas that are damaged are to be conditioned with new wood chip mulch:
 - a. Will be free from deleterious materials and suitable as a top dressing.
 - b. Loosen subgrade of planting beds to a minimum of 4 inches. Remove stones larger than 1" and sticks, roots, rubbish and other extraneous matter and legally dispose. Mulch shall contain minimal nutrient content.

c. Areas shall be conditioned with new top soil, tilled in to a depth of two (2") inches, and then two (2") inches of mulch placed throughout the affected area. Mulch should be a <u>minimal</u> nutrient, non-growth promoting mulch (non-die/stain/colored, wood chip/mulch, mulch that does not promote growth) spread around the affected area and section of planting bed/box/defined area. Contractor should work with KCHA to determine limits of mulch required for the project.

5.0 **DIVISIONS**

DIVISION 1 GENERAL CONDITIONS

A. Site Staging and Deliveries

- 1. Contractor will coordinate bulk material deliveries with Owner forty-eight (48) hours prior to delivers where potential for parking access will be temporarily blocked no more than fifteen (15) minutes.
- 2. Contractor and subcontractors will only be allowed to off load and load up tools no more than fifteen (15) minutes. Heavy equipment used specifically for construction will not block emergency access. Construction activities will not block parking areas not scheduled for work.
- 3. Contractor to use existing parking on site to stage materials in areas approved by the property manager. Property manager to designate parking spaces that will be fenced off around the perimeter and locked, to store materials for current phases of work. KCHA will work with property manager to designate areas around the building for additional material storage. No trash and debris will be stored, and must be removed from the site on a daily basis. Contractor must perform daily cleanup around staging site to ensure dust and debris does not build up in the parking lot.

B. Temporary Facilities

- 1. Use of onsite restroom facilities will not be permitted. Contractor is responsible for portable toilets; Contractor to consult with Owner for placement.
- 2. Contractor is not permitted to use tenant or building power without KCHA approval. For bidding purposes, Contractor is to provide power for this project.
- 3. Contractor to provide all dumpsters, job shacks, con-x boxes, fencing etc. Locations to be negotiated and approved by Owner.

DIVISION 2 SITE CONSTRUCTION

A. Demolition

Refer to Specification Section 024100

- 1. Contractor shall remove and legally dispose of all materials as required by the contract documents to allow for the installation of all new specified materials. Materials included to be removed and disposed of are as follow (but non-inclusive): concrete walkways and curbing, concrete slabs and steps and selective asphalt areas. Prior to commencement of any excavation or trenching, the Contractor shall be responsible to provide all utility locates, both private or public, and shall become familiar with locations of all existing systems and related shut offs. The Contractor shall have the contact information for service providers posted and readily available in the event of an emergency or necessary shutoff requiring provider's knowledge.
- 2. Contractor shall salvage and/or protect all materials as necessary until they are to be reinstalled, (i.e. select doors and hardware, fire extinguishers and cabinets, etc.). This list is not all inclusive and the Contractor must verify which items are to be salvaged per the contract documents and in coordination with the Owner prior to demolition activities.

- 3. The Contractor shall remove and legally dispose of all materials as required by the contract documents to allow for the installation of all new specified materials. Materials to be demolished include (but not limited to) excavations (spoils), concrete sidewalks and ramps, concrete curbs, asphalt pavement, abandoned piping that conflicts with new installations etc. Due to limited parking and staging area, demolished materials may not be stockpiled on site and must be removed each day or contained in dumpsters located in Owner approved areas.
- 4. Demolition debris shall be discarded off-site in an approved and lawful manner. Unless otherwise stated, all material scheduled for removal or disposal becomes the property of the Contractor. Burying of rubbish on-site or otherwise is prohibited. <u>Due to limited parking, demolished materials cannot be stockpiled on site and must be removed each workday or contained in dumpsters located in Owner approved areas.</u>
- 5. Install temporary barriers as necessary to protect tenants and staff during demolition. Take precautionary measures to close off access to the areas of work, but ensure that the measures taken can be easily breached by first responders in case of emergency. It is the Contractor's responsibility to notify the Fire Marshal that work is being done on the decks and landings and that the ingress and egress from the units have been temporarily modified.
- 6. Recycling efforts will be performed to the fullest extents possible as specified in the contract documents. Contractor to comply with recycling measures and reporting per Specification section 01 74 19 Construction Waste Management and Disposal.

B. Existing Utilities

- 1. Prior to commencement of any work (IE: Excavation and trenching), the Contractor shall be responsible to provide all utility locates and shall become familiar with locations of all existing systems and related shut offs. The Contractor shall have the contact information for service providers posted and readily available in the event of an emergency or necessary shutoff requiring provider's knowledge.
- 2. Contractor to verify any existing equipment, devices, fixtures, cabling, wires and conduit is in operational order prior to moving, relocating, replacing or rerouting. KCHA makes the assumption that equipment was working prior to Contractor's arrival on site and should continue to work at the end of the project.
- 3. Contractor to include in bid all necessary modifications, labor and parts necessary to run/reroute all existing cabling and exposed conduit. All costs associated with work noted will be Contractor's responsibility.
- 4. The Contractor will coordinate the decommissioning of electrical, plumbing, fire and HVAC elements with the Owner and respective service providers.
- 5. Contractor responsible for repairing all wires, cables, communication boxes etc. damaged by construction activities on same day incident occurs.

C. Landscaping

- 1. Prior to start of work, the Contractor and Owner shall walk the site identifying the condition of all trees, plants, sod and landscaping. Any trees, plants, sod etc. damaged due to construction activities must be replaced by the Contractor with like vegetation at Contractor's expense.
- 2. Restore all landscape impacted by construction to existing pre-construction conditions. Grass areas to be restored with sod. See requirements above in Section 4, Subsection C.

D. Locating And Utilities

1. Contractor responsible to locate all public and private utilities that may be impacted by construction work.

2. Contractor to be responsible to repair and or replace all utilities and building components damaged by construction work.

DIVISION 3 CONCRETE

A. Cast-In-Place Concrete

Refer to Specification Section 033000

- 1. Contractor will be replacing sidewalks, slabs, ramps. Emergency vehicle, tenant access (to site and units must be maintained at all times. ADA access must be maintained to all accessible units. Contractor will need to provide temporary ramps where necessary. Removal of slabs, approaches, or aprons, with thicken edges may exceed 6-8 inches. KCHA does not expect additional charges unless slab/walkway thicknesses are above conditions listed.
- 1. Contractor shall be responsible for verifying existing conditions prior to bidding and must protect those conditions during construction. The Contractor will be responsible to match existing elevations or plan provided elevations. Closely monitor and adjust elevations as needed to maintain finished elevations shown on drawings. Where drawings do not show finished elevations, Contractor to work with existing grades to incorporate new work.
- 2. Install all forms securely with stakes. Install #10 gauge welded wire mesh with 4" square pattern in all sidewalk locations. Contractor will consult with Owner over method the Contractor is to use when installing wire mesh. Owner will not accept mesh being installed on base material, ready mix then poured on top and then the mesh pulled up with rake or hammer. Owner has found that over eight (80%) percent of wire is never raised sufficiently into the concrete and the Owner loses the benefit of using wire mesh.
- 2. Prior to concrete placement, a KCHA representative must be notified 48 hours in advance to inspect and approve forms, wire mesh and rebar installation. Owner will be looking for sight lines, adequate staking, bracing, plumb of the side forms, square or correctness of angles in walkways (45s are 45 degrees), if forms run true (don't curve or bow), run a consistent spacing between side forms to side forms. Contractor's Superintendent MUST discuss expectations with KCHA site staff prior to setting forms. This will make inspections go smoothly and eliminate delays.
- 3. Concrete to be 3000 PSI for all walkways, and landing/slabs. Contractor's site superintendent to submit ready mix truck/load tickets to Owner's representative for every delivery received on site.
- 4. 4" thick concrete walkway over 2" crushed rock over compacted suitable bae material. Expansion joints 10' O.C. per plans. Finish will be 4" radius perimeter edging and broom finish.
- 5. Protect all adjacent surfaces from concrete splatter and damage. Contractor will be responsible for all cleanup and damage due to spillage, impact damage etc., at no cost to Owner.
- 6. Contractor will provide Eco pan which will be removed within twenty-four (24) hours after concrete placement.
- 7. Roots encountered during the demolition process shall be treated by the Contractor as follows: Roots shall be severed by cutting down and away from the tree trunk. The purpose

is to minimize movement and disturbance to the remaining root system between the tree and the point of cutting.

B. Concrete Saw Cutting

- 1. Provide straight and square cuts where new and existing concrete will meet.
- 2. Contractor to walk site with Owner prior to demolition to establish saw cut limits at the entrances of common areas, transitions between new and old work, unit entries, and other areas deemed sensitive to Owner at time of pre-bid and pre-con walk.

DIVISION 5 METALS

A. Shop-Applied Coatings

Refer to Specification 050513

- 1. A Powder-Coat finish to be applied on metal guard rails and metal handrails.
- 2. Coatings will be free of dips and other imperfections causing telegraphing through finished coatings.
- 3. Color: Black; Gloss: Medium; Surface: Fine Texture.

B. Metal Fabrications

Refer to Specification 055000

- 1. Field Coordinate and layout work prior to beginning installation.
- 2. Provide all rolled shapes, bars, plates, sheets, strips, accessories, and the like, as detailed or required for complete installations.

C. Metal Railings

Refer to Specification 055200

- 1. Provide all labor and materials to perform installation of guardrails and steel pipe handrails at ramps.
- 2. Ease exposed edges with small uniform radius.
- 3. Countersink and drill at unobstructed locations.

DIVISION 6 WOOD & PLASTICS

A. Rough Carpentry

Refer to Specification Section 061000 Rough Carpentry; Section 061600 Sheathing, Section 074646 Fiber Cement Siding and Trim; and Section 099100 Painting.

- 1. Field coordinate and layout work prior to beginning installation. Cut, fit and install rough carpentry construction at locations indicated in drawings and required to complete work of contract.
- 2. Use preservative treated wood products for materials for permanent construction at all exposed framing and where resting on concrete, masonry or roofing as otherwise indicated, or required.
- 3. Provide blocking and framing necessary to complete construction of shed framing, roof joists, and recessed fire extinguisher cabinets as noted on plans.
- 4. Contractor responsible to coordinate design, and all installation requirements with manufacturer and all code requirements.

B. Sheathing

Refer to Specification 061600

- 1. Field coordinate and layout work prior to beginning installation. Cut, fit and install rough carpentry construction at locations indicated in drawings and required to complete work of contract.
- 2. Contractor to install ¹/₂" plywood sheathing on shed exterior and at common wall of adjoining sheds. Interior shed walls will have ¹/₂" CDX on all four sides. Contractor to cut around surfaced mounted conduit on back shed wall.
- 3. Sheathing will be installed from bottom plate to top plate line. *Sheathing will be installed tight to door jamb less than 1/4" and caulked.*

DIVISION 7 THERMAL AND MOISTURE PROTECTION

A. Weather Resistant Barrier

Refer to Specification Section 072500

- The Contractor shall provide all labor and materials to install DuPont Tyvek "Drain Wrap" incorporating all required flashing(s) at penetrations and openings. Components of assembly will be provided by a single manufacturer. Installation shall conform to the manufacturer's best practices and as shown, described, or reasonably inferred on drawings.
- 2. Prior to mass production, the Contractor will provide a mockup of the WRB and associate flashing at openings and penetrations to demonstrate the method of installation incorporating interior and exterior corners.

B. Laminated Fiberglass Shingles

Refer to Specification Section 073100

- 1. Contractor to remove all roof framing and shingles as part of the demolition of the existing sheds. Refer to plan page AD2.1.
- 2. Comply with accessory manufactures' instructions and recommendations. Coordinate installation with roofing system to ensure weather tight performance. Anchor securely to structure to with stand inward and outward loads.
- 3. Contractor to only remove areas of replacement that can be covered with new material in the same day of work. Removing vast areas of work, exposing the building to the elements for more than a day will not be acceptable. Refer to plan pages A2.1, A2.2, A4.1, and A4.2 for details.

C. Fiber Cement Siding and Trim

Refer to Specification Section 074646

1. The Contractor to provide all labor and materials for the installation of a complete siding system, inclusive off all siding, soffits, fascia, trim (i.e. inside and outside corners, door casing at office, all necessary caulking and fasteners. Refer to specifications for dimensions of various sizes and depth of siding materials.

D. Sheet Metal Flashing and Trim

Refer to Specification Section 076200

1. The Contractor shall provide labor and materials to install metal flashings and counterflashings, at perimeter edge, roof to wall, door heads, and belly bands, as required for weathertight installation. Color: Brown, 2. Contractor shall provide new PVC down spout adapter cap (white) and where applicable reducer and vertical run of pipe to new downspout connection. Connection termination shall be no greater that four (4") inches above adjacent grade.

DIVISION 8 OPENINGS

A. Fiberglass Doors

Refer to Specification Section 081613

- 1. Exterior door removal and replacement of existing shed doors. The Contractor shall provide and install new pre-finished fiberglass doors, *composite jambs, bored, mortised and machined to fit the hardware specified per the door hardware schedule.* Refer to A2.1 for door schedule.
- 2. Existing doors located at Manager's office and laundry will be removed and reinstalled to complete concrete work. Refer to plan page 2/A6.2.
- 1. The Contractor shall verify existing rough openings and conditions prior to ordering. It is recommended that door modifications be made prior to application of finish. The Contractor shall plane, shim and infill as necessary to provide a maximum of a 1/2" clearance for door installation to allow for backer rod and/or insulation installation.
- 2. All doors will be installed true, level and plumb with square and consistent reveals and close (and latch) firmly with the single push of a hand and provide a proper seal and not allow daylight to be seen on from either side of door.
- 3. Where applicable thresholds shall be grouted with non-shrink grout between threshold and concrete slab. In locations were grout may degrade existing substrate, Contractor shall us shims, adhesive, or other approved materials that will prevent threshold from bow or bending when pressure is applied.
- 4. Contractor to protect all doors prior and during installation. KCHA will not accept doors damaged during transport or installation.
- 5. All doors and frames to be removed and replaced within the same day.

B. Door Hardware

Refer to Specification Section 087100

- 1. Contractor to coordinate keying with owner prior to ordering.
- 2. <u>Contractor to confirm hardware setback with door and composite jamb.</u>
- 3. All hardware will be defect and blemish free and adjusted, cleaned, and protected prior to final acceptance.

DIVISION 9 FINISHES

A. Painting

Refer to Specification Section 099100

1. All new installed exterior trim have one (1) coat of primer (unless pre-prime) and two (2) coats of paint applied. Pre-primed materials to have two (2) of coats paint applied.

- 2. Contractor to caulk all new exterior trim to bevel siding, plywood siding and around exterior doors where they meet new exterior trim.
- 3. Contractor to provide qualified and experienced caulker for all sealant work.
- 4. No over applications, smears, or ruts will be accepted.
- 5. Refer to A3.1 for Paint Schedule

DIVISION 31 EARTHWORK

A. Site Preparation

Refer to Specification Section 312200

- 1. All areas adjacent to excavation activities are to be protected and restored to existing conditions at Contractor's expense. If pedestrian access is obstructed to the site, residential units or laundry facilities, the Contractor is responsible to provide safe access to these and all common areas which may include (but not limited to) temporary ramps, handrails, compacted gravel pathways, barricades and fencing.
- 2. The Contractor shall, at a minimum, remove the full depth of selective areas of asphalt as shown or described. The areas of the drawing are representative and it shall be the responsibility of the Contractor to assess and determine location of necessary trenching

B. Grub & Clear

- 1. Demolition debris shall be discarded off-site in an approved and lawful manner. Unless otherwise stated, all material scheduled for removal or disposal becomes the property of the Contractor. Burying of rubbish on-site or otherwise is prohibited. <u>Due to limited parking, demolished materials cannot be stockpiled on site and must be removed each workday or contained in dumpsters located in Owner approved areas.</u>
- 2. The Contractor and subcontractors must comply with all health and safety regulations when working on site including (but not limited to), trenching, shoring, equipment operation, loading, trucking, traffic control etc.
- 3. The Contractor shall use a durable water repellent sheeting to protect usable soils from saturation during rain or excessive drying to prevent dust. <u>All open trenches to be monitored and protected during work hours and securely covered at the end of each workday.</u>
- 4. Contractor is responsible for all erosion control in work zone and areas that may be affected adjacent to the work zone. A TESC measure includes (but is not limited to) catch basin inserts (socks) and dust control. Exposed soils deemed acceptable for re-use by Owner must be covered. Unsuitable soils for backfill must be removed from site each work day
- 5. Contractor is responsible for over-excavated materials. Owner will not make additional payments for excessive removal of spoils and backfill materials.
- 6. Contractor is responsible for all staking and grading in order to provide elevations per plans and specifications. Owner is informing the Contractor that the drawings depict a typical condition and may not capture all conditions on site. The Contractor is to closely monitor and adjust the elevation as needed to maintain a finish elevation shown on the drawings. Where drawings do not show elevations, the Contractor to match existing grades. The Owner has detailed (on the plans) a concrete walkway which includes a sub-base of compacted crushed

rock. This means the Contractor will have to carry a contingency or risk factor to accommodate any additional sub-base that may be required to adjust to final elevation.

B. Tree Protection

- 1. Tree protection barriers shall be installed as appropriate five (5') feet beyond drip line of significant trees and a minimum of four (4') feet in height constructed of chain link, or polyethylene laminar safety fencing of similar material, protection to be installed prior to any land disturbance.
- 2. Tree stumps and associated root system shall be removed in their entirety where proposed areas of concrete or asphalt placements are identified. Stumps located within landscape areas, may be ground a minimum of 8" below finished grade. The Contractor is responsible for hauling of all wood chips generated from this work.

DIVISION 32 EXTERIOR IMPROVEMENTS

A. ASPHALT PAVING

Refer to Specification Section 312200

- 1. The Contractor shall provide all labor, materials and equipment necessary to complete necessary asphalt repair and replacements. All work shall be performed following the completion of all subsequent work (i.e. demolition, subgrade preparation); asphalt work shall include application of tack coat and seal coating of existing parking lot.
- 2. Provide straight and square cuts where new and existing asphalt will meet. Contractor to walk site with Owner prior to demolition to establish saw cut limits at the entrances of common areas and transitions between new and old work.
- 3. New Asphalt Sections HMA Class B. 3/8" aggregate. Provide and install compacted crushed rock and compact to ninety-five (95%) percent of modified proctor where replacement is indicated.
- 4. Owner strongly recommends that the Contractor uses a crushed rock mix with fines for the last four (4") inch lift as to mitigate the need to increase the tonnage of the asphalt to compensate for voids in the a mix that does not roll smooth.
- 5. Tack coat all joints of new asphalt to existing.

B. PAVEMENT MARKINGS

Refer to Specification Section 321723

- 1. Provide and install all new striping, including fire lane striping, ADA, appropriate symbols, hash marks, parking stall and stall numbers. Contractor is expected, as a complete project, to prep or paint. Contractor is responsible for any damage caused by overspray. Final layout to be reviewed and approved by Owner.
- 2. Contractor to include all digging, concrete and Ulti-Mate sign post up to 6' and reinstall handicap signage. Speed bumps to be painted yellow and fire curbing as required by City of Auburn.
- 3. Contractor is expected, as a complete project, to prep or paint. Contractor is responsible for any damage caused by overspray. Final layout to be reviewed and approved by Owner

- 4. Additional striping will include the curb area at the smoking structure and striping around the current fire hydrant and curbing.
- 5. Pavement lettering and stenciling shall be installed per WSDOT Section 8-22-.3.

C. SITE IMPROVEMENTS

Refer to Specification Section 323000

- 1. The Contractor shall provide and install (1) one Al's collection bench series (AL-01000-72) Recycled plastic slates. See plan page C4.0.
- 2. Benches are to be secured per manufacturer's recommendations.

D. STORM DRAINAGE SYSTEMS

Refer to Specification Section 334000

- 1. Pipe and join materials specified for storm drainage shall be per civil drawings.
- 2. Accurately record actual locations of pipe runs, connections, catch basins, cleanouts, and invert elevations.
- 3. Hand trim excavations to required elevations. Correct over excavation with bedding material.
- 4. Remove large stones or other hard matter that could damage pipe or impede consistent backfilling or compaction.
- 5. Coordinate Placement of inlet and outlet pipe or duct sleeves as indicated on Construction Drawings.
- 6. Drainage Structures shall conform to Section 7-05.2 of the City of Auburn Engineering and Construction Standards.
- 7. After completion of the Work, or any part thereof, the job shall be tested to determine that it has been installed in accordance with the drawings and specifications. In general, the Work shall prove to be in good condition, installed in accordance with the drawings and specifications and ready for use.

END OF SECTION

SECTION 01 1000 SUMMARY

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes the following:
 - 1. Work covered by the Contract Documents.
 - 2. Phased construction.
 - 3. Work under other contracts.
 - 4. Owner-furnished products.
 - 5. Owner's occupancy requirements.
 - 6. Applicable Codes.
 - 7. Reference standards.
 - 8. Use of premises and work restrictions.
 - 9. Specification formats and conventions.
 - 10. Execution, correlation and intent Contract Documents.

1.3 WORK COVERED BY CONTRACT DOCUMENTS

- A. Project Identification:
 - 1. Project Name: Northwood Square Site and Storage
 - 2. Project Location: <u>529 8th Street N.E., Auburn, WA 98002</u>
- B. Owner/Developer: King County Housing Authority
 - 1. Owner's Representative: <u>Amy Kurtz</u>
 - 2. Contact Phone: <u>206-574-1283</u>

C. Architects / Engineer:

- 1. Representative: <u>SHKS</u>
- 2. Contact Phone: 206-675-9151
- D. Reference Section A of the Bid Documents for scope of work.

1.4 PHASED CONSTRUCTION

A. Construction shall be phased to accommodate Owner's desired schedule as noted in the bid documents and/or drawings, if applicable. Final Project Schedule shall include

phasing schedule to be prepared by the Contractor, and reviewed and approved by the Owner.

- B. Contractor shall prepare a phasing plan to maintain access to residential units during construction. Plan to be reviewed and approved by Owner prior to Work commencing.
- C. Before commencing Work of each phase of construction, submit an updated copy of Contractor's Final Project Schedule showing the sequence, commencement and completion dates, and move-out and -in dates of residents for all phases of the Work.

1.5 WORK UNDER OTHER CONTRACTS

A. General: Cooperate fully with separate contractors so work on those contracts may be carried out smoothly, without interfering with or delaying work under this Contract. Coordinate the Work of this Contract with work performed under separate contracts.

1.6 OWNER-FURNISHED PRODUCTS

- A. Owner will furnish products as indicated. This section includes receiving, unloading, handling, storing, protecting, and installing Owner-furnished products.
- B. Owner-Furnished Products:
 - 1. Products and materials as noted on drawings or otherwise indicated for re-use.
 - 2. Products and materials as noted on drawings or otherwise indicated to be supplied by Owner.

1.7 OWNER'S OCCUPANCY REQUIREMENTS

- A. Owner Occupancy of Completed Areas of Construction: Owner reserves the right to occupy and to place and install equipment in completed areas of the building before Substantial Completion. Such placement of equipment and partial occupancy shall not constitute acceptance of the total Work. PRIOR to partial Owner Occupancy:
 - 1. Owner will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied.
 - 2. Contractor is responsible for obtaining a Certificate of Occupancy from authorities having jurisdiction before Owner occupancy.
 - 3. The mechanical and electrical systems shall be fully operational; all required tests and inspections shall be successfully completed for areas to be occupied. On occupancy, Owner will operate and maintain mechanical and electrical systems serving the occupied portions of building.
 - 4. On occupancy, Owner will assume responsibility for maintenance and custodial service for the occupied portions of building.
 - 5. Coordinate insurance requirements with Owner prior to Owner occupancy of completed areas of the building.
- 1.8 CUTTING & PATCHING Refer to Section 01 7329 Cutting and Patching.

1.9 APPLICABLE CODES

A. Perform all Work in accordance with the current code requirements of the city holding jurisdiction over the site where Work is to be completed.

B. Certification of Code Compliance: All materials, methods and equipment shall comply with requirements of applicable codes and the Contract Documents, including requirements of all incorporated standards. The Contractor shall furnish, as a part of the Contract, certification of such compliance if requested by the Architect or the Code Enforcing Agency. Such certification shall be submitted in the form of test results or other data from a recognized independent testing laboratory. Contractor shall coordinate and provide all required submittals to the Code Enforcing Agency in a timely manner so as to not delay progress of the Project.

1.10 USE OF PREMISES AND WORK RESTRICTIONS

- A. General: Contractor shall have full use of premises for construction operations subject to phased construction requirements as specified in this Section and as indicated on Drawings by the Contract limits.
 - 1. Security Procedures: Refer to the Scope of Work Division 1, Section 4 Safety, Protection & Restoration and 01 5000 Temporary Facilities and Controls, for required security procedures to be followed while working at this building.
 - 2. Contractor Identification: All Contractors on site shall be easily identifiable and must wear clothing, name badges, hardhats, safety vests, or other visible identification or identifying article (approved by Owner) with employee's, laborer or staff member's company logo or company name.
- B. Use of Site: Limit use of premises to areas within the Contract limits indicated. Do not disturb portions of Project site beyond areas in which the Work is indicated.
 - 1. Limits: Confine construction operations to areas as indicated on drawings.
- C. Use of Parking Lot: Limited.
- D. Work Restrictions, General: Comply with restrictions on construction operations.
 - 1. Comply with limitations on use of public streets and with other requirements of authorities having jurisdiction.
- E. On-Site Work Hours: Work in the existing occupied buildings will start no earlier than 8:00am, and will be completed by 4:30pm. Hours for work performed outside of the building will be at the discretion of Owner's Representative.
 - 1. Early Morning Hours: As approved by Owner's representative.
 - 2. Hours for Utility Shutdowns: Notify Owner and all affected utility companies seventy-two (72) hours in advance of proposed shutdown.
 - 3. Contractor to notify residents of Work a minimum of forty-eight (48) hours prior to start of Work.
 - a. If Work progress or new work affects additional or a new set of residents, the Contractor must give a new notice of work to all affected residences a minimum of forty-eight (48) hours prior to start of Work.
 - 4. Hours for Core Drilling and other loud activities must comply with city of jurisdiction's noise codes.
- F. Nonsmoking Properties. All of King County Housing Authority properties are nonsmoking.

- G. Controlled Substances: Use of tobacco products and other controlled substances on Project site is not permitted.
- H. Employee Screening: Comply with Owner's requirements for drug and background screening of Contractor personnel working on Project site.
 - 1. Maintain list of approved screened personnel with Owner's representative.

1.11 SPECIFICATION FORMATS AND CONVENTIONS

- A. Specification Format: The Specifications are organized into Divisions and Sections using the 33-division format and CSI/CSC's "2010 Master Format" numbering system.
 - 1. Division 01: Sections in Division 01 govern the execution of the Work of all Sections in the Specifications.
- B. Specification Content: The Specifications use certain conventions for the style of language and the intended meaning of certain terms, words and phrases when used in particular situations. These conventions are as follows:
 - 1. Abbreviated Language: Language used in the Specifications and other Contract Documents is abbreviated. Words and meanings shall be interpreted as appropriate. Words implied, but not stated, shall be inferred as the sense requires. Singular words shall be interpreted as plural and plural words shall be interpreted as singular, where applicable, as the context of the Contract Documents indicates.
 - 2. Imperative mood and streamlined language are generally used in the Specifications. Requirements expressed in the imperative mood are to be performed by Contractor. Occasionally, the indicative or subjunctive mood may be used in the Section Text for clarity to describe responsibilities that must be fulfilled indirectly by Contractor or by others when so noted.
 - a. The words "shall," "shall be," or "shall comply with," depending on the context, are implied where a colon (:) is used within a sentence or phrase.

1.12 EXECUTION, CORRELATION AND INTENT – CONTRACT DOCUMENTS

- A. General: If there is a discrepancy between Scope of Work, Specifications and/or Drawings, the Scope of Work shall take precedence followed by the Specifications and lastly the drawings. Contact Owner immediately for clarification of conflicts, corrections and clarifications.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

END OF SECTION 01 1000

SECTION 01 2600 CONTRACT MODIFICATION PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Section includes administrative and procedural requirements for handling and processing Contract Modifications.
- B. Related Sections:
 - 1. Division 01 Section "Product Requirements" for administrative procedures for handling requests for substitutions made after Contract award.
- 1.3 MINOR CHANGES IN THE WORK
 - A. Reference Article 7 in the General Conditions.

1.4 PROPOSAL REQUESTS

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. Owner-Initiated Change Order Requests (COR): Contractor will issue a detailed description of:
 - 1. Proposed changes in the Work that may require adjustment to the Contract Sum or the Contract Time. If necessary, the description will include supplemental or revised Drawings and Specifications.
 - 2. Change Order Requests (COR) and Construction Change Directives (CCD) shall be initiated by the Owner, dated and sequentially numbered on Owner provided forms.
 - 3. CORs are not instructions either to stop Work in progress or to execute the proposed change.
 - 4. After receipt of COR, submit a quotation estimating cost adjustments to the Contract Sum and the Contract Time necessary to execute the change.
 - a. Provide a cost breakdown, including overhead and profit as a separate line item, and time extension request as provided for in Article 7 of The General Conditions.
 - b. Provide all necessary product information, specifications, etc. required to justify any Contractor requested changes.
 - 5. The allowed markup shall cover all indirect project costs, including but not limited to, the project Overhead, Profit and General Conditions
 - a. The Contractor shall be allowed a maximum of fourteen (14%) percent Overhead, Profit, and General Conditions, on the cost of craft labor,

equipment, small tools and materials for self-performed Change Order work.

- b. The Contractor shall be allowed a maximum of eight (8%) percent Overhead, Profit and General Conditions on the cost of craft labor, equipment, small tools and materials for Subcontractor Change Order work. The Contractor is not allowed to take profit on the profit of the Subcontractor as stated in form HUD-5370, section 29.
- c. A Subcontractor shall be allowed a maximum of fourteen (14%) percent of the cost of craft labor, equipment, materials and small tools for Overhead, Profit and General Conditions, for self-performed Change Order work.
- d. A Lower-Tier Subcontractor shall be allowed a maximum of fourteen (14%) percent of the cost of craft labor, equipment, materials and small tools for Overhead, Profit and General Conditions, for self-performed Change Order work.
- 6. Include a list of quantities of products required (or eliminated) their unit costs and a total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 7. Indicate applicable taxes, delivery charges, equipment rental and amounts of trade discounts.
- 8. Include costs of labor and supervision directly attributable to the change.
- 9. Include an updated Contractor's Final Project Schedule that indicates the effect of the change, including but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - a. Time extension requests must demonstrate the impact on the project Critical Path Schedule. See the General Conditions Article 15 and Section 01 3200 -Construction Progress Documentation.
- 10. Review all pricing provided by subcontractors and suppliers for accuracy and completeness. Verify that their scope of work is consistent with the requested change. Verify math is correct and that markup rates complies with the General Conditions.
- 11. After signing the Change Order Request or CCD, the Contractor shall return it to the Owner.
- 12. Quotation Form: Use forms acceptable to Owner.
- 13. After review of the Contractor's price, cost breakdown and requested time extension, if any, the Owner will submit for estimation and do one of the following:
 - a. Sign and route for approval.
 - b. Reject and resubmit to the Contractor for pricing correction.
 - c. Revise the Change Order Request or CCD and submit to the Contractor for repricing.
- 14. Prior to the Owner's acceptance of Change Order Requests, appropriate personnel shall also review the change requests.
- C. Contractor-Initiated Proposals: If latent or changed conditions require modifications to the Contract, Contractor may initiate a claim by submitting a request for a change to Owner.
 - 1. Include a statement outlining reasons for the change and the effect of the change on the Work. Provide a complete description of the proposed change. Indicate the effect of the proposed change on the Contract Sum and the Contract Time.

- 2. Provide a cost breakdown, including overhead and profit as a separate line item, and time extension request as provided for in Article 7 of the General Conditions.
- 3. Provide all necessary product information, specifications, etc. required to justify any Contractor requested changes.
- 4. Allowances for direct supervision, safety, small tools, overhead and profit are limited by the General Conditions, Article 7.1.1.
- 5. Include a list of quantities of products required (or eliminated), their unit costs and total amount of purchases and credits to be made. If requested, furnish survey data to substantiate quantities.
- 6. Indicate applicable taxes, delivery charges, equipment rental and amounts of trade discounts.
- 7. Include costs of labor and supervision directly attributable to the change.
- 8. Include an updated Contractor's Final Project Schedule that indicates the effect of the change, including but not limited to, changes in activity duration, start and finish times, and activity relationship. Use available total float before requesting an extension of the Contract Time.
 - a. Time extension requests must demonstrate the impact on the project Critical Path Schedule. See the General Conditions, and Section 01 3200-Construction Progress Documentation.
- 9. Comply with requirements in Division 01 Section "Product Requirements" if the proposed change requires substitution of one product or system for product or system specified.
- 10. Proposal Request Form: Use form acceptable to Owner.
- 11. After review of the Contractor's price, cost breakdown and requested time extension, if any, the Owner will submit for estimation and do one of the following:
 - a. Sign and send on for approval.
 - b. Reject and resubmit to the Contractor for pricing correction.
 - c. Revise the Change Order Request or CCD and submit to the Contractor for repricing.
- 12. Prior to the Owner's acceptance of Change Order Requests, appropriate personnel shall also review the change requests.

1.5 CONSTRUCTION CHANGE DIRECTIVE (CCD)

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. Construction Change Directive: The Owner may issue a Field Authorization in accordance with provisions in Article 7, General Conditions. Construction Change Directive instructs Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
- C. Documentation: Maintain detailed records on a time and material basis of Work required by the CCD, with supporting documentation as required by CORs.
 - 1. After completion of change, submit an itemized account and supporting data necessary to substantiate cost and time adjustments to the Contract, consistent with Article 7 of the General Conditions of the Contract.

1.6 CHANGE ORDER PROCEDURES

- A. The Contractor will have ten (10) calendar days from first notification to supply Owner with the information outlined in this section.
- B. When approved and signed by the Owner, the Construction Change Directive will either be included in a Change Order Request (COR) to be charged against the Contract Allowance, or will be included in a formal Change Order, which will modify the Contract amount.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION (Not Used)

END OF SECTION 01 2600

SECTION 01 2900 PAYMENT PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section specifies administrative and procedural requirements necessary to prepare and process Applications for Payment.

1.3 DEFINITIONS

A. Schedule of Values: A statement furnished by Contractor allocating portions of the Contract Sum to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

1.4 SCHEDULE OF VALUES

- A. Coordination: Coordinate preparation of the Schedule of Values with preparation of Contractor's Master Project Schedule.
 - 1. Correlate line items in the Schedule of Values with other required administrative forms and schedules, including the following:
 - a. Application for Payment forms with Continuation Sheets.
 - b. Submittal Schedule.
 - 2. Submit the Schedule of Values to Owner at earliest possible date but no later than fourteen (14) calendar days after the date of bid opening.
 - 3. Sub-schedules: Where the Work is separated into phases requiring separately phased payments, provide sub-schedules showing values correlated with each phase of payment.
- B. Format and Content: Use the Project Documents as a guide to establish line items for the Schedule of Values. Lines items are based on Scope of Work and sequencing.
 - 1. Identification: Include the following Project identification on the Schedule of Values:
 - a. Project name and location.
 - b. Name of Owner.
 - c. Owner's contract number.
 - d. Contractor's name and address.
 - e. Date of submittal.
 - 2. Arrange the Schedule of Values in tabular form with separate columns to indicate the following for each item listed:

- a. Item #, including separate line for an Allowance (if applicable).
- b. Description of the Work.
- c. Total Dollar Value.
- d. Previous Application Amount.
- e. Dollar Amount Charged on Current Pay Application.
- f. Stored Materials.
- g. Total Complete and Stored.
 - 1) Percentage of the Contract Sum to nearest onehundredth percent, adjusted to total one hundred (100%) percent.
- h. Balance to Finish
- i. Retainage
- 3. Provide a breakdown of the Contract Sum in enough detail to facilitate continued evaluation of Applications for Payment and progress reports. Coordinate with the Project Documents. Provide several line items for principal subcontract amounts, where appropriate.
- 4. Round amounts to nearest one (1) cent; total shall equal the Contract Sum.
- 5. Provide a separate line item in the Schedule of Values for each part of the Work where Applications for Payment may include materials or equipment purchased or fabricated and stored, but not yet installed.
 - a. Differentiate between items stored on-site and items stored offsite. Include evidence of insurance or bonded warehousing per Article 9.3.2 AIA A201-2017 General Conditions.
- 6. Provide separate line items in the Schedule of Values for initial cost of materials, for each subsequent stage of completion, and for total installed value of that part of the Work.
- 7. Each item in the Schedule of Values and Applications for Payment shall be complete. Include total cost and proportionate share of general overhead and profit for each item.
 - a. Temporary facilities and other major cost items that are not direct cost of actual work-in-place may be shown either as separate line items in the Schedule of Values or distributed as general overhead expense, at Contractor's option.
- 8. Schedule Updating: Update and resubmit the Schedule of Values before the next Applications for Payment when Change Orders result in a change in the Contract Sum.

1.5 APPLICATIONS FOR PAYMENT

- A. Each Application for Payment shall be consistent with previous applications and payments as certified by Owner and paid for by Owner.
- B. Payment Application Times:
 - 1. The date for each progress payment is indicated in the Contract between Owner and Contractor.
 - 2. The period of construction Work covered by each Application for Payment is the period indicated in the Contract.
- C. Payment Application Forms:

- 1. Use Payment Application forms as provided by Owner for Applications for Payment.
- D. Application Preparation: Complete every entry on form. Notarize and execute by a person authorized to sign legal documents on behalf of Contractor. Owner will return incomplete applications without action.
 - 1. Entries shall match data on the Schedule of Values and Contractor's Final Project Schedule. Use updated schedules if revisions were made.
 - 2. Include amounts of Change Orders and Construction Change Directives issued before last day of construction period covered by application.
 - 3. Provide current Subcontractor List with each Application for Payment.
- E. Transmittal: Submit one (1) signed and notarized original Application for Payment to Owner by a method ensuring receipt within forty-eight (48) hours. The Application for Payment shall include intent to pay prevailing wages and a running spreadsheet that itemizes both the intent and affidavit of wages paid to date for each subcontractor.
 - 1. Transmit Application for Payment with a transmittal form listing attachments and recording appropriate information about the application.
- F. General Contractor Certification Upon Application For Payment: Refer to attached Exhibits in Contract.
- G. Initial Application for Payment: Administrative actions and submittals that must precede the first Application for Payment include the following:
 - 1. List of subcontractors. (Required at pre-construction conference.)
 - 2. Schedule of Values.
 - 3. Contractor's Final Project Schedule to be created in MS Project or equivalent format. (Required at pre-construction conference.)
 - 4. Certificates of insurance and insurance policies. (Required prior to contract award.)
 - 5. Performance and payment bonds. (Required prior to contract award.)
 - 6. Section 3 Work Plan, for projects whose contract value is five hundred thousand dollars (\$500,000) or higher.
 - 7. Intent to Pay Prevailing Wages must be filed with L&I.
 - 8. Contractor to provide Owner with initial Cash Flow Projections. Cash Flow Projection needs to reflect Work as detailed in Final Project Schedule.
- H. **All** Application for Payments will be reviewed for completion and correctness, including reasons outlined in A201-2017 General Conditions.
- I. Application for Payment at Substantial Completion: After Owner issues the Certificate of Substantial Completion, submit an Application for Payment showing one hundred (100%) percent completion for portion of the Work claimed as substantially complete.
 - 1. Include documentation supporting claim that the Work is substantially complete and a statement showing an accounting of changes to the Contract Sum.

- 2. This application shall reflect Certificates of Partial Substantial Completion issued previously for Owner occupancy of designated portions of the Work.
- J. Final Payment Application: Administrative actions and submittals that must precede or coincide with submittal of the final Application for Payment include the following (refer to Article 9.10 in AIA A201-2017 General Conditions:
 - 1. Completion of Project closeout requirements.
 - 2. Completion of Items specified.
 - 3. Ensure that unsettled claims will be settled.
 - 4. Ensure that incomplete Work is not accepted and will be completed without undue delay.
 - 5. Transmittal of required Project construction records to the Owner.
 - 6. Proof that fees and similar obligations were paid.
 - 7. Removal of temporary facilities and services.
 - 8. Removal of surplus materials, rubbish and similar elements.
 - 9. Operations and Maintenance Manuals
 - 10. Record Drawings (i.e. As-built drawings, redline drawings)
 - 11. Final Affidavits of Wages Paid filed with L&I.
- 1.6 SPECIAL PAYMENT REQUIREMENTS (Not Used)
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

END OF SECTION 01 2900

SECTION 01 3100 PROJECT MANAGEMENT AND COORDINATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative provisions for coordinating construction operations on Project including, but not limited to, the following:
 - 1. General project coordination procedures.
 - 2. Coordination Drawings.
 - 3. Project meetings.
 - 4. Requests for Information (RFIs).
- B. See Division 01 Section "Execution" for procedures for coordinating general installation and field-engineering services, including establishment of benchmarks and control points.

1.3 DEFINITIONS

A. RFI: Request from Contractor seeking interpretation or clarification of the Contract Document.

1.4 COORDINATION

- A. Coordination: Contractor's Responsibility to coordinate construction operations included in different Sections of the Specifications to ensure efficient and orderly installation of each part of the Work. Coordinate construction operations, included in different Sections that depend on each other for proper installation, connection and operation.
 - 1. Schedule construction operations in sequence required to obtain the best results where installation of one part of the Work depends on installation of other components, before or after its own installation.
 - 2. Coordinate installation of different components with other contractors to ensure maximum accessibility for required maintenance, service and repair.
 - 3. Make adequate provisions to accommodate items scheduled for later installation.
- B. Administrative Procedures: Coordinate scheduling and timing of required administrative procedures with other construction activities and activities of other contractors to avoid conflicts and to ensure orderly progress of the Work. Such administrative activities include, but are not limited to, the following:
 - 1. Preparation of Contractor's Final Project Schedule.
 - 2. Preparation of the Schedule of Values.
 - 3. Installation and removal of temporary facilities and controls.
 - 4. Delivery and processing of submittals.
 - 5. Progress meetings.

- 6. Pre-installation conferences.
- 7. Project closeout activities.

1.5 PROJECT MEETINGS

- A. General: Contractor is responsible for scheduling and conducting meetings and conferences at Project site, unless otherwise indicated.
 - 1. Attendees: Inform participants, others who are involved and individuals whose presence is required, of date and time of each meeting. Notify Owner of scheduled meeting dates and times.
 - 2. Agenda: Prepare the meeting agenda. Distribute the agenda to all invited attendees.
 - 3. Minutes: Record significant discussions and agreements achieved. Distribute the meeting minutes to everyone concerned; send the electronic version of the meeting minutes to the Project Manager and the Project Engineer, within three (3) business days of the meeting.
- B. Pre-construction Conference: A pre-construction conference shall be scheduled before starting construction. Owner to hold the conference at Project site or another convenient location. Conduct the meeting to review responsibilities and personnel assignments.
 - 1. Attendees: Authorized representatives of Owner, Architect, and their consultants; Contractor and its superintendent; major subcontractors; suppliers; and other concerned parties shall attend the conference.
 - 2. Agenda: Owner to discuss items of significance that could affect progress, including the following:
 - a. Scope of Work.
 - b. Contract Start and End Dates.
 - c. Authority of Owner's Personnel.
 - d. Davis Bacon/Prevailing Wage Certified Payroll Reports/Labor Relations and Section 3.
 - e. Insurance Certificate, Endorsement and Performance and Payment Bonds.
 - f. General Requirements/Special Conditions.
 - g. Final Project Schedule, including Phasing.
 - h. Easements, Permits, Lines & Grades.
 - i. Contractor's Superintendent.
 - j. Subcontractor List.
 - k. Safety Plan (see attachment at end of this section).
 - 1. Tests, Samples and Observations.
 - m. Progress Meetings and Reports.
 - n. Applications and Certificates of Payment, and Retention.
 - o. Progress Payments.
 - p. Change Orders.
 - q. Warranty Requirements.
 - r. Submittals.
 - s. Temporary and Storage Facilities, Staging Areas and Jobsite Security.
 - t. Clean-up and Trash Removal.
 - u. Salvage of Materials and Spare Materials.
 - v. Record Drawings.
 - w. Substantial Completion, Final Payment and Retainage.
 - x. Recycling and Energy Conservation.

- y. Minutes: The Owner will record and distribute Pre-construction meeting minutes via email.
- C. Progress Meetings: The Contractor will conduct progress meetings at weekly intervals. (refer to Article 3.1.4 of General Conditions).
 - 1. Attendees: In addition to representatives of Owner and the Contractor, each subcontractor, supplier and other entity concerned with current progress or involved in planning, coordination, or performance of future activities shall be represented at these meetings. All participants at the conference shall be familiar with Project and authorized to conclude matters relating to the Work.
 - 2. Agenda: Review and correct or approve minutes of previous progress meeting. Review other items of significance that could affect progress. Include topics for discussion as appropriate to status of Project.
 - a. Contractor's Final Project Schedule: Review progress since the last meeting. Determine whether each activity is on time, ahead of schedule, or behind schedule, in relation to Contractor's Final Project Schedule. Determine how construction behind schedule will be expedited; secure commitments from parties involved to do so. Discuss whether schedule revisions are required to ensure that current and subsequent activities will be completed within the Contract Time.
 - 1) Contractor shall provide a short term look-ahead schedule for presentation and review at each progress meeting.
 - b. Review present and future needs of each entity present, including the following:
 - 1) Interface requirements.
 - 2) Sequence of operations.
 - 3) Status of submittals.
 - 4) Deliveries.
 - 5) Off-site fabrication.
 - 6) Access.
 - 7) Site utilization.
 - 8) Temporary facilities and controls.
 - 9) Work hours.
 - 10) Hazards and risks.
 - 11) Progress cleaning.
 - 12) Quality and work standards.
 - 13) Status of correction of deficient items.
 - 14) Field observations.
 - 15) RFIs.
 - 16) Status of proposal requests.
 - 17) Pending changes.
 - 18) Status of Change Orders.
 - 19) Pending claims and disputes.
 - 20) Documentation of information for payment requests.
 - 21) Safety
 - 22) Section 3 compliance and status
 - 3. Minutes: Contractor will record the meeting minutes.
 - 4. Reporting: Contractor will email the minutes to all concerned prior to the meeting and will distribute written copies of the minutes of the meeting to each party present and to parties who should have been present.
 - a. Schedule Updating: Revise Contractor's Two (2)-Week Look Ahead Schedule after each progress meeting. This schedule will be discussed in

each progress meeting. Issue revised schedule concurrently with the report of each meeting.

b. Contractor's weekly reports will consist of five (5) daily reports, each reflecting the preceding five (5) days. These reports will be sent electronically to the Owner on a schedule that will be determined at the Pre-Construction Meeting or at each progress meeting.

1.6 **REQUESTS FOR INFORMATION (RFIs)**

- Procedure: Immediately on discovery of the need for interpretation of the Contract A. Documents, and if not possible to request interpretation at Project meeting, prepare and submit an RFI in the form specified.
 - RFIs generated from subcontractor or supplier of the Contractor must be routed 1. through the General Contractor.
 - Coordinate and submit RFIs in a prompt manner so as to avoid delays in 2. Contractor's work or work of subcontractors.
 - If a suggestion can be determined or derived at by the initiator of the RFI, it is 3. required the suggestion be supplied with the submitted RFI. If no suggestion is given where one is possible, the RFI will be returned as incomplete.
- B. Content of the RFI: Include a detailed, legible description of item needing interpretation and the following:
 - 1. Project name and number.
 - 2. RFI Subject.
 - 3. Date.
 - Name of Contractor. 4.
 - 5. Name of Architect.
 - 6. RFI number, numbered sequentially.
 - 7. Specification Section number and title and related paragraphs, as appropriate.
 - 8. Drawing number and detail references, as appropriate.
 - 9. Field dimensions and conditions, as appropriate.
 - Contractor's suggested solution(s). If Contractor's solution(s) impact the Contract 10. Time or the Contract Sum, Contractor shall state impact in the RFI.
 - Contractor's signature. 11.
 - Attachments: Include drawings, descriptions, measurements, photos, product 12. data, shop drawings and other information necessary to fully describe items needing interpretation.
- C. Hard-Copy RFIs: Form established by Contractor's Project Management system.
 - Identify each page of attachments with the RFI number and sequential page 1. number.
- D. Owner's Action: Owner will review each RFI, determine action required and return it. Allow five (5) working days for Owner's acknowledgement of each RFI.
 - The following RFIs will be returned without action: 1.
 - Requests for approval of submittals. a.
 - Requests for approval of substitutions. b.
 - Requests for coordination information already indicated in the Contract c. Documents.
 - d. Requests for adjustments in the Contract Time or the Contract Sum.
 - Requests for interpretation of Owner's actions on submittals. e.
 - Incomplete RFIs or RFIs with numerous errors. f.

- 2. Owner's action may include a request for additional information, in which case Owner's time for response will start again.
- 3. Owner's action may include architect and/or engineer recommendation or approval of proposed solution.
- 4. Owner's action on RFIs that may result in a change to the Contract Time or the Contract Sum may be eligible for Contractor to submit Change Order Request according to General Conditions.
 - a. If Contractor believes the RFI response warrants change in the Contract Time or the Contract Sum, notify Owner in writing within five (5) days of receipt of the RFI response.
- E. On receipt of Owner's action, update the RFI log and immediately distribute the RFI response to affected parties. Review response and notify Owner within three (3) days if Contractor disagrees with response.
- F. Contractor RFI Log: Prepare, maintain and submit a tabular log of RFIs organized by the RFI number. Submit log weekly. Include the following:
 - 1. Project name.
 - 2. Name and address of Contractor.
 - 3. Name and address of Architect.
 - 4. RFI number including RFIs that were dropped and not submitted.
 - 5. RFI description.
 - 6. Date the RFI was submitted.
 - 7. Date Architect's response was received.
 - 8. Identification of related Minor Change in the Work, Construction Change Directive and Change Order Request, as appropriate.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION (Not Used)

GENERAL CONTRACTOR SITE SAFETY PLAN CHECKLIST

Instructions: Please indicate whether or not your Site Safety Plan contains the following provisions.

Contractors: Site Safety Plan Evaluation

Yes	No	N/A		
[]	[]	[]	1.	Will your company have a written, established, supervised and enforced site
				safety plan for the project? (The site safety plan must be presented before
				starting work)
[]	[]	[]	2.	Does the site safety plan include an orientation and weekly safety meetings that show your employees and other subcontractors what they need to know to
				perform their job assignments safely?
[]	[]	[]	3.	Does the site safety plan describe how and when to report on-the-job injuries?
[]	[]	[]	4.	Does the site safety plan identify on-site available 1st Aid / CPR trained personnel, readily accessible first-aid and and/or access to the nearest clinic or hospital on job site?
[]	[]	[]	5.	Does the site safety plan identify what to do in an emergency, including how to exit the workplace?
[]	[]	[]	6.	Does the site safety plan explain how employees and other subcontractors report unsafe conditions and practices?
[]	[]	[]	7.	Does the site safety plan describe the required personal protective equipment (PPE) and the proper use and care of the PPE?
[]	[]	[]	8.	Is there an on-site Haz-com Program that identifies hazardous materials
				(Asbestos, Lead) or chemicals including instruction about the safe use and storage?
[]	[]	[]	9.	Does the site safety plan identify the designated representative responsible for job-site Safety?
[]	[]	[]	10.	Does the site safety plan describe who is responsible for performing and recording regular periodic site reviews, and inspections for your employees and subcontractors?
[]	[]	[]	11.	Does the site safety plan describe programs related to housekeeping and jobsite safety?
[]	[]	[]	12.	Does the site safety plan include a job-site specific written fall protection plan covering potential falls hazards and protections?
[]	[]	[]	13.	Does the site safety plan describe electrical and or power generation controls?
[]	[]	[]	14.	Does the site safety plan have provisions for trenching /excavations and/or confined space?

Notes:

SECTION 01 3200 CONSTRUCTION PROGRESS DOCUMENTATION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for documenting the progress of construction during performance of the Work, including the following:
 - 1. Contractor's Final Project Schedule.
 - 2. Submittals Schedule (refer to Article 3.10.2 in General Conditions AIA A201-2017).
 - 3. Daily construction reports.

1.3 DEFINITIONS

- A. Activity: A discrete part of a project that can be identified for planning, scheduling, monitoring and controlling the construction project. Activities included in a Final Project Schedule consume time and resources.
 - 1. Critical activities are activities on the critical path. They must start and finish on the planned early start and finish times.
 - 2. Predecessor Activity: An activity that precedes another activity in the network.
 - 3. Successor Activity: An activity that follows another activity in the network.
- B. CPM: Critical Path Method, which is a method of planning and scheduling a construction project where activities are arranged based on activity relationships. Network calculations determine when activities can be performed and the critical path of Project.
- C. Critical Path: The longest connected chain of interdependent activities through the network schedule that establishes the minimum overall Project duration and contains no float.
- D. Float: The measure of leeway in starting and completing an activity.
 - 1. Float time is not for the exclusive use or benefit of either Owner or Contractor, but is a jointly owned, expiring Project resource available to both parties as needed to meet schedule milestones and Contract completion date.
- E. Fragnet: A partial or fragmentary network that breaks down activities into smaller activities for greater detail.
- F. Major Area: A story of construction, a separate building or a similar significant construction element.

1.4 SUBMITTALS

- A. Submittals Schedule: Submit one (1) electronic copy of schedule to the Owner. Arrange the following information in a tabular format
 - 1. Scheduled date for first submittal.
 - 2. Specification Section number and title.
 - 3. Submittal category (action or informational).
 - 4. Name of subcontractor (if applicable).
 - 5. Description of the Work covered.
 - 6. Scheduled date for Architect's final release or approval.
- B. Contractor's Final Project Schedule: Submit one (1) electronic copy and one (1) hard copy of initial schedule to the Owner. The hard copy should be large enough to show entire schedule for entire construction period.

1.5 COORDINATION

- A. Coordinate preparation and processing of schedules and reports with performance of construction activities and with scheduling and reporting of separate contractors.
- B. Coordinate Contractor's Final Project Schedule with the Schedule of Values, list of subcontracts, Submittals Schedule, progress reports, payment requests, and other required schedules and reports.
 - 1. Secure time commitments for performing critical elements of the Work from parties involved.
 - 2. Coordinate each construction activity in the network with other activities and schedule them in proper sequence.

PART 2 PRODUCTS

- 2.1 SUBMITTALS SCHEDULE
 - A. Preparation: Submit a schedule of submittals to the Owner, arranged in chronological order by dates required by Final Project Schedule. Include time required for review, resubmittal, ordering, manufacturing, fabrication and delivery when establishing dates.
 - 1. Coordinate Submittals Schedule with list of subcontracts, the Schedule of Values, and Contractor's Final Project Schedule.
 - 2. Submit concurrently with the first complete submittal of Contractor's Final Project Schedule.
- 2.2 CONTRACTOR'S FINAL PROJECT SCHEDULE, GENERAL (refer to Article 3.10.1in the General Conditions AIA A201)
 - A. Contractor to provide a baseline, cost-loaded schedule in MS Project or Primavera to the Owner's Representative one (1) day **prior** to the weekly project meeting. Contractor is to update the schedule weekly.
 - B. Time Frame: Extend schedule from date established for commencement of the Work to date of Substantial Completion as set by the date of Notice to Proceed.

- 1. Contract completion date shall not be changed by submission of a schedule that shows an early completion date, unless specifically authorized by Change Order.
- C. Activities: Treat each story or separate area as a separate numbered activity for each principal element of the Work. Comply with the following:
 - 1. Activity Duration.
 - 2. Procurement Activities: Include procurement process activities for long lead items and major items as separate activities in schedule.
 - a. Procurement cycle activities include, but are not limited to, submittals, approvals, purchasing, fabrication and delivery.
 - 3. Submittal Review Time: Include review and resubmittal times indicated in Division 01 Section "Submittal Procedures" in schedule. Coordinate submittal review times in Contractor's Final Project Schedule with Submittals Schedule.
 - 4. Startup and Testing Time: Include not less than ten (10) days for startup and testing.
 - 5. Substantial Completion: Indicate completion in advance of date established for Substantial Completion, and allow time for Architect's administrative procedures necessary for certification of Substantial Completion.
- D. Constraints: Include constraints and work restrictions indicated in the Contract Documents and as follows in Final Project Schedule, and show how the sequence of the Work is affected.
 - 1. Phasing: Arrange list of activities on schedule by phase.
 - 2. Work by Owner: Include a separate activity for each portion of the Work performed by Owner.
 - 3. Work Restrictions: Show the effect of the following items on the Final Project Schedule:
 - a. Coordination with existing construction.
 - b. Limitations of continued occupancies.
 - c. Uninterruptible services.
 - d. Partial occupancy before Substantial Completion.
 - e. Use of premises restrictions.
 - f. Provisions for future construction.
 - g. Seasonal variations.
 - h. Environmental control.
 - 4. Work Stages: Indicate important stages of construction for each major portion of the Work.
- E. Milestones: Include milestones indicated in the Contract Documents in Final Project Schedule, including, but not limited to, the Notice to Proceed, Substantial Completion and Final Completion.
- F. Contract Modifications: For each proposed contract modification and concurrent with its submission, prepare a time-impact analysis using fragnets to demonstrate the effect of the proposed change on the overall project schedule.

2.3 CONTRACTOR'S FINAL PROJECT SCHEDULE (GANTT CHART)

- A. Gantt-Chart Schedule: Submit to the Owner a comprehensive, fully developed, horizontal Gantt-chart-type, Contractor's Final Project Schedule within fourteen (14) calendar days of date after Letter of Award. Base schedule on the Preliminary Construction Schedule and whatever updating and feedback was received since the start of Project. The Gantt-Chart Final Project Schedule can be either in MS Project or equivalent format.
- B. Preparation: Indicate each significant construction activity separately. Identify first workday of each week with a continuous vertical line.
 - 1. For construction activities that require three (3) months or longer to complete, indicate an estimated completion percentage in ten (10%) percent increments within time bar.

PART 3 EXECUTION

3.1 CONTRACTOR'S FINAL PROJECT SCHEDULE

- A. Contractor's Final Project Schedule Updating: At two (2) week intervals, update schedule to reflect actual construction progress and activities. Issue schedule three (3) days before each regularly scheduled progress meeting.
 - 1. Revise schedule immediately after each meeting or other activity where revisions have been recognized or made. Issue updated schedule concurrently with the report of each such meeting.
 - 2. Include a report with updated schedule that indicates every change, including, but not limited to, changes in logic, durations, actual starts and finishes, and activity durations.
 - 3. As the Work progresses, indicate Actual Completion percentage for each activity.
- B. Distribution: Distribute electronic copies of approved schedule to Owner, separate contractors, testing and inspecting agencies, and other parties identified by Contractor with a need-to-know schedule responsibility.
 - 1. Post copies in Project meeting rooms and temporary field offices.
 - 2. When revisions are made, distribute updated schedules to the same parties and post in the same locations. Delete parties from distribution when they have completed their assigned portion of the Work and are no longer involved in performance of construction activities.

END OF SECTION 01 3200

SECTION 01 3300 SUBMITTAL PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. This Section includes administrative and procedural requirements for submitting Shop Drawings, Product Data, Samples and other submittals.

B. Related Sections:

- 1. See Division 01 40 00 Section "Quality Requirements" for submitting test and inspection reports and for mockup requirements.
- 2. See Division 01 77 00 Section "Closeout Procedures" for submitting warranties.
- 3. See Division 01 78 39 Section "Project Record Documents" for submitting Record Drawings, Record Specifications, and Record Product Data.
- 4. See Division 01 78 23 Section "Operation and Maintenance Data" for submitting operation and maintenance manuals.

1.3 DEFINITIONS

- A. Action Submittals: Written and graphic information that requires Owner's responsive action.
- B. Informational Submittals: Written information that does not require Owner's responsive action. Submittals may be rejected for not complying with requirements.

PART 2 PRODUCTS

2.1 SUBMITTAL PROCEDURES

- A. General Submittal Procedure Requirements:
 - 1. Submit electronic submittals to Owner via email as PDF electronic files.
 - a. Owner will return annotated file. Annotate and retain one (1) copy of file as an electronic Project record document file.
- B. Coordination: Coordinate preparation and processing of submittals with performance of construction activities.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
 - 2. Coordinate transmittal of different types of submittals for related parts of the Work so processing will not be delayed because of need to review submittals concurrently for coordination.
 - a. Owner reserves the right to withhold action on a submittal requiring coordination with other submittals until related submittals are received.

- C. Processing Time: Allow enough time for submittal review, including time for resubmittals, as follows:
 - 1. Time for review shall commence on Owner's receipt of submittal. No extension of the Contract Time will be authorized because of failure to transmit submittals enough in advance of the Work to permit processing, including resubmittals.
 - 2. Initial Review: Allow five (5) working days for initial review of each submittal. Allow additional time if coordination with subsequent submittals is required. Owner will advise Contractor when a submittal being processed must be delayed for coordination.
 - 3. Intermediate Review: If intermediate submittal is necessary, process it in same manner as initial submittal.
 - 4. Resubmittal Review: Allow seven (7) working days for review of each resubmittal.
- D. Identification: Place a permanent label or title block on each submittal for identification.
 - 1. Indicate name of firm or entity that prepared each submittal on label or title block.
 - 2. Provide a space approximately **4 by 5 inches** on label or beside title block to record Contractor's review and approval markings and action taken by Owner.
 - 3. Include the following information on label for processing and recording action taken:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect (if applicable).
 - d. Name and address of Contractor.
 - e. Name and address of subcontractor.
 - f. Name and address of supplier.
 - g. Name of manufacturer.
 - h. Submittal number or other unique identifier, including revision identifier.
 - 1) Submittal number shall use consecutively numbered submittals (001, 002, etc), followed by the Specification Section number, followed by a sequential number indicating version (e.g., 001-13 3300-0).
 - 2) Example: 001 01 1300 0
 - a) 001: Consecutively numbered submittals
 - b) 01 1300: Specification Section
 - c) 0: Version of submittal (0 = original submittal; 1 = first resubmittal; 2 = 2nd resubmittal; etc.)
 - i. Number and title of appropriate Specification Section.
 - j. Drawing number and detail references, as appropriate.
 - k. Location(s) where product is to be installed, as appropriate.
 - 1. Other necessary identification.
- E. Deviations: Highlight, encircle or otherwise specifically identify deviations from the Contract Documents on submittals.
 - 1. Substitution Requests.

- F. Additional Copies: Unless additional copies are required for final submittal, and unless Owner observes noncompliance with provisions in the Contract Documents, initial submittal may serve as final submittal.
 - 1. Additional copies submitted for maintenance manuals will not be marked with action taken and will be returned.
- G. Transmittal: Package each submittal individually and appropriately for transmittal and handling. Transmit each submittal using a transmittal form. Owner will return submittals, without review, received from sources other than Contractor.
 - 1. Include Contractor's certification stating that information submitted complies with requirements of the Contract Documents.
- H. Resubmittals: Make resubmittals in same form and number of copies as initial submittal.
 - 1. Note date and content of previous submittal.
 - 2. Note date and content of revision in label or title block and clearly indicate extent of revision.
 - 3. Resubmit submittals until they are marked "Make Corrections Noted" or "No Exceptions Taken".
- I. Distribution: Furnish copies of final submittals to manufacturers, subcontractors, suppliers, fabricators, installers and others as necessary for performance of construction activities. Show distribution on transmittal forms.
 - 1. Use for Construction: Use only final submittals with mark indicating "Make Corrections Noted" or "No Exceptions Taken".

2.2 CONTRACTOR'S USE OF ARCHITECT'S CAD FILES

- A. General: At Contractor's written request, copies of Architect's CAD files will be provided to Contractor for Contractor's use in connection with Project, subject to the following conditions:
 - 1. Release of CADD information will be restricted to the following categories:
 - a. Architectural floor plans.
 - b. Site plan.
 - c. Reflected ceiling plans.
 - d. Exterior elevations.
 - e. Stair sections.
 - 2. The CADD database will contain only the background information; the sheet numbers, sheet titles, room names and numbers, reference symbols, and other similar data will not be included.
 - 3. The CADD database will be generated on PC hardware with Autodesk AutoCAD software. Architect has the capability to develop CADD output to meet capabilities of all major platforms and major media types.
 - 4. When requesting CADD databases, specify the output form required.

PART 3 PRODUCTS

3.1 ACTION SUBMITTALS

A. General: Prepare and submit to Owner, Action Submittals required by individual Specification Sections.

- B. Electronic Submittals: Identify and incorporate information in each electronic submittal file as follows:
 - 1. Assemble complete submittal package into a single indexed file incorporating submittal requirements of a single Specification Section and transmittal form with links enabling navigation to each item.
 - 2. Name file with submittal number or other unique identifier, including revision identifier.
 - a. File name shall use project identifier and Specification Section number followed by a decimal point and then a sequential number (e.g., LNHS-061000.01). Resubmittals shall include an alphabetic suffix after another decimal point (e.g., LNHS-061000.01.A).
 - 3. Provide means for insertion to permanently record Contractor's review and approval markings and action taken by Owner.
 - 4. Transmittal Form for Electronic Submittals: Use electronic form acceptable to Owner, containing the following information:
 - a. Project name.
 - b. Date.
 - c. Name and address of Architect.
 - d. Name of Construction Manager.
 - e. Name of Contractor.
 - f. Name of firm or entity that prepared submittal.
 - g. Names of subcontractor, manufacturer, and supplier.
 - h. Category and type of submittal.
 - i. Submittal purpose and description.
 - j. Specification Section number and title.
 - k. Specification paragraph number or drawing designation and generic name for each of multiple items.
 - 1. Drawing number and detail references, as appropriate.
 - m. Location(s) where product is to be installed, as appropriate.
 - n. Related physical samples submitted directly.
 - o. Indication of full or partial submittal.
 - p. Transmittal number, numbered consecutively.
 - q. Submittal and transmittal distribution record.
 - r. Other necessary identification.
 - s. Remarks.
 - 5. Metadata: Include the following information as keywords in the electronic submittal file metadata:
 - a. Project name.
 - b. Number and title of appropriate Specification Section.
 - c. Manufacturer name.
 - d. Product name.
- C. Product Data: Collect information into a single submittal for each element of construction and type of product or equipment.
 - 1. If information must be specially prepared for submittal because standard printed data are not suitable for use, submit as Shop Drawings, not as Product Data.
 - 2. Mark each copy of each submittal to show which products and options are applicable.
 - 3. Include the following information, as applicable:
 - a. Manufacturer's written recommendations.
 - b. Manufacturer's product specifications.

- c. Manufacturer's installation instructions.
- d. Manufacturer's catalog cuts.
- e. Wiring diagrams showing factory-installed wiring.
- f. Printed performance curves.
- g. Operational range diagrams.
- h. Compliance with specified referenced standards.
- i. Testing by recognized testing agency.
- 4. Number of Copies: Submit to Owner, four (4) copies of Product Data, unless otherwise indicated. Owner will return two (2) copies. Mark up and retain one (1) returned copy as a Project Record Document.
- D. Shop Drawings: Prepare Project-specific information, drawn accurately to scale. Do not base Shop Drawings on reproductions of the Contract Documents or standard printed data, unless submittal of Architect's CAD Drawings is otherwise permitted.
 - 1. Preparation: Fully illustrate requirements in the Contract Documents. Include the following information, as applicable:
 - a. Dimensions.
 - b. Identification of products.
 - c. Fabrication and installation drawings.
 - d. Roughing-in and setting diagrams.
 - e. Wiring diagrams showing field-installed wiring, including power, signal, and control wiring.
 - f. Shop-work manufacturing instructions.
 - g. Templates and patterns.
 - h. Schedules.
 - i. Notation of coordination requirements.
 - j. Notation of dimensions established by field measurement.
 - k. Relationship to adjoining construction clearly indicated.
 - 1. Seal and signature of professional engineer if specified.
 - m. Wiring Diagrams: Differentiate between manufacturer-installed and field-installed wiring.
 - 2. Sheet Size: Except for templates, patterns and similar full-size drawings, submit to Owner, Shop Drawings on sheets at least 8-1/2 by 11 inches but no larger than 36 by 48 inches.
 - 3. Number of Copies: Submit to Owner, a minimum of three (3) opaque (bond) copies of each submittal. Submit additional copies as required for each consultant. Owner will return two (2) copies. At the sole discretion of the Owner electronic copies may be acceptable.
- E. Samples: Submit to Owner, Samples for review of kind, color, pattern, and texture for a check of these characteristics with other elements and for a comparison of these characteristics between submittal and actual component as delivered and installed.
 - 1. Transmit Samples that contain multiple, related components such as accessories together in one submittal package.
 - 2. Identification: Attach label on unexposed side of Samples that includes the following:
 - a. Generic description of Sample.
 - b. Product name and name of manufacturer.
 - c. Sample source.
 - d. Number and title of appropriate Specification Section.

- 3. Disposition: Maintain sets of approved Samples at Project site, available for quality control comparisons throughout the course of construction activity. Sample sets may be used to determine final acceptance of construction associated with each set.
- 4. Samples for Initial Selection: Submit manufacturer's color charts consisting of units or sections of units showing the full range of colors, textures and patterns available.
 - a. Number of Samples: Submit one (1) full set of available choices where color, pattern, texture or similar characteristics are required to be selected from manufacturer's product line. Owner will return submittal with options selected.
- 5. Samples for Verification: Submit full-size units or Samples of size indicated, prepared from same material to be used for the Work, cured and finished in manner specified, and physically identical with material or product proposed for use, and that show full range of color and texture variations expected. Samples include, but are not limited to, the following: partial sections of manufactured or fabricated components; small cuts or containers of materials; complete units of repetitively used materials; swatches showing color, texture and pattern; color range sets; and components used for independent testing and inspection.
 - a. Number of Samples: Submit three (3) sets of Samples. Owner will retain two (2) Sample sets; remainder will be returned.
- F. Product Schedule or List: As required in individual Specification Sections, prepare a written summary indicating types of products required for the Work and their intended location.
 - 1. Number of Copies: Submit a minimum of three (3) copies of product schedule or list, unless otherwise indicated. Submit additional copies for each consultant required to review the submittal. Owner will return two (2) copies.
- G. Submittals Schedule: Comply with requirements specified in the General Conditions of the Contract and Owner-Contractor Contract.
- H. Application for Payment: Comply with requirements specified in the Owner-Contractor Contract.
- I. Schedule of Values: Comply with requirements specified in the Owner-Contractor Contract. If needed, combine subcontract list in paragraph below with product list above. Subcontract list is required by General Conditions to be submitted as soon as practical after award of the Contract.
- J. Subcontract List: Prepare a written summary identifying individuals or firms proposed for each portion of the Work, including those who are to furnish products or equipment fabricated to a special design.
 - 1. Number of Copies: Submit electronically to Owner, one (1) copy of subcontractor list, unless otherwise indicated.

3.2 INFORMATIONAL SUBMITTALS

A. General: Prepare and submit Informational Submittals required by other Specification Sections.

- 1. Number of Copies: Submit to Owner, two (2) copies of each submittal, unless otherwise indicated. Owner will not return copies.
- 2. Certificates and Certifications: Provide a notarized statement that includes signature of entity responsible for preparing certification. Certificates and certifications shall be signed by an officer or other individual authorized to sign documents on behalf of that entity.
- 3. Test and Inspection Reports: Comply with requirements specified in Division 01 40 Section "Quality Requirements."
- B. Coordination Drawings: Comply with requirements specified in Division 01 31 00 Section "Project Management and Coordination."
- C. Contractor's Final Project Schedule: Comply with requirements specified in the General Conditions of the Contract, and Owner-Contractor Contract.
- D. Qualification Data: Prepare written information that demonstrates capabilities and experience of firm or person. Include lists of completed projects with project names and addresses, names and addresses of architects and Owners, and other information specified.
- E. Welding Certificates: Prepare written certification that welding procedures and personnel comply with requirements in the Contract Documents. Submit record of Welding Procedure Specification (WPS) and Procedure Qualification Record (PQR) on AWS forms. Include names of firms and personnel certified.
- F. Installer Certificates: Prepare written statements on manufacturer's letterhead certifying that Installer complies with requirements in the Contract Documents and, where required, is authorized by manufacturer for this specific Project.
- G. Manufacturer Certificates: Prepare written statements on manufacturer's letterhead certifying that manufacturer complies with requirements in the Contract Documents. Include evidence of manufacturing experience where required.
- H. Product Certificates: Prepare written statements on manufacturer's letterhead certifying that product complies with requirements in the Contract Documents.
- I. Material Certificates: Prepare written statements on manufacturer's letterhead certifying that material complies with requirements in the Contract Documents.
- J. Material Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting test results of material for compliance with requirements in the Contract Documents.
- K. Product Test Reports: Prepare written reports indicating current product produced by manufacturer complies with requirements in the Contract Documents. Base reports on evaluation of tests performed by manufacturer and witnessed by a qualified testing agency, or on comprehensive tests performed by a qualified testing agency.
- L. Research/Evaluation Reports: Prepare written evidence, from a model code organization acceptable to authorities having jurisdiction, that product complies with building code in effect for Project.

- M. Pre-construction Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of tests performed before installation of product, for compliance with performance requirements in the Contract Documents.
- N. Compatibility Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of compatibility tests performed before installation of product. Include written recommendations for primers and substrate preparation needed for adhesion.
- O. Field Test Reports: Prepare reports written by a qualified testing agency, on testing agency's standard form, indicating and interpreting results of field tests performed either during installation of product or after product is installed in its final location, for compliance with requirements in the Contract Documents.
- P. Maintenance Data: Prepare written and graphic instructions and procedures for operation and normal maintenance of products and equipment. Comply with requirements specified in Division 01 78 23 Section "Operation and Maintenance Data."
- Q. Design Data: Prepare written and graphic information, including, but not limited to, performance and design criteria, list of applicable codes and regulations, and calculations. Include list of assumptions and other performance and design criteria and a summary of loads. Include load diagrams if applicable. Provide name and version of software, if any, used for calculations. Include page numbers.
- R. Manufacturer's Instructions: Prepare written or published information that documents manufacturer's recommendations, guidelines, and procedures for installing or operating a product or equipment. Include name of product and name, address and telephone number of manufacturer.
- S. Manufacturer's Field Reports: Prepare written information documenting factoryauthorized service representative's tests and inspections. Include the following, as applicable:
 - 1. Statement on condition of substrates and their acceptability for installation of product.
 - 2. Summary of installation procedures being followed, whether they comply with requirements and, if not, what corrective action was taken.
 - 3. Results of operational and other tests and a statement of whether observed performance complies with requirements.
- T. Insurance Certificates and Bonds: Prepare written information indicating current status of insurance or bonding coverage. Include name of entity covered by insurance or bond, limits of coverage, amounts of deductibles, if any, and term of the coverage.
- U. Material Safety Data Sheets (MSDSs): Submit information directly to Owner.
 - 1. Architect will not review submittals that include MSDSs and will return them for resubmittal.

3.3 DELEGATED DESIGN

- A. Performance and Design Criteria: Where professional design services or certifications by a design professional are specifically required of Contractor by the Contract Documents, provide products and systems complying with specific performance and design criteria indicated.
 - 1. If criteria indicated are not sufficient to perform services or certification required, submit a written request for additional information to Owner.
- B. Delegated-Design Submittal: In addition to Shop Drawings, Product Data, and other required submittals, electronically submit three (3) copies of a statement, signed and sealed by the responsible design professional, for each product and system specifically assigned to Contractor to be designed or certified by a design professional.
 - 1. Indicate that products and systems comply with performance and design criteria in the Contract Documents. Include list of codes, loads, and other factors used in performing these services.
 - 2. If submittal has a wet stamp, then send three (3) hard copies, with the wet stamp to Owner for approval. Owner will return one (1) copy to Contractor.

PART 4 EXECUTION

- 4.1 CONTRACTOR'S REVIEW
 - A. Review each submittal and check for coordination with other Work of the Contract and for compliance with the Contract Documents. Note corrections and field dimensions.
- 4.2 OWNER'S ACTION
 - A. Action Submittals: Owner will review each submittal, make marks to indicate corrections or modifications required, and return it. Owner will stamp each submittal with an action stamp and will mark stamp appropriately to indicate action taken.
 - B. Informational Submittals: Owner will review each submittal and will not return it, or will return it if it does not comply with requirements. Owner will forward each submittal to appropriate party.
 - C. Partial submittals are not acceptable, will be considered nonresponsive, and will be returned without review.
 - D. Submittals not required by the Contract Documents may not be reviewed and may be discarded.

END OF SECTION 01 3300

SECTION 01 4000 QUALITY REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for quality assurance and quality control.
- B. Testing and inspecting services are required to verify compliance with requirements specified or indicated. These services do not relieve Contractor of responsibility for compliance with the Contract Document requirements.
 - 1. Specified tests, inspections and related actions do not limit Contractor's other quality assurance and quality-control procedures that facilitate compliance with the Contract Document requirements.
 - 2. Requirements for Contractor to provide quality-assurance and quality-control services required by Architect, Owner, or authorities having jurisdiction are not limited by provisions of this Section.
- C. See Divisions 02 through 33 Sections for specific test and inspection requirements, if applicable. Not all Divisions will be used.

1.3 DEFINITIONS

- A. Quality-Assurance Services: Activities, actions and procedures performed before and during execution of the Work to guard against defects and deficiencies and substantiate that proposed construction will comply with requirements.
- B. Quality-Control Services: Tests, inspections, procedures and related actions during and after execution of the Work to evaluate that actual products incorporated into the Work and completed construction comply with requirements. Services do not include contract enforcement activities performed by Owner.
- C. Mockups: Full-size, physical assemblies that are constructed on-site. Mockups are used to verify selections made under sample submittals, to demonstrate aesthetic effects and, where indicated, qualities of materials and execution, and to review construction, coordination, testing or operation; they are not Samples. Approved mockups establish the standard by which the Work will be judged.
- D. Pre-construction Testing: Tests and inspections that are performed specifically for the Project before products and materials are incorporated into the Work to verify performance or compliance with specified criteria.

- E. Product Testing: Tests and inspections that are performed by an NRTL, an NVLAP, or a testing agency qualified to conduct product testing and acceptable to authorities having jurisdiction, to establish product performance and compliance with industry standards.
- F. Source Quality-Control Testing: Tests and inspections that are performed at the source, i.e., plant, mill, factory or shop.
- G. Field Quality-Control Testing: Tests and inspections that are performed on-site for installation of the Work and for completed Work.
- H. Testing Agency: An entity engaged to perform specific tests, inspections or both. Testing laboratory shall mean the same as testing agency.
- I. Installer/Applicator/Erector: Contractor or another entity engaged by Contractor as an employee, Subcontractor, or Lower Tier Subcontractor, to perform a particular construction operation, including installation, erection, application and similar operations.
 - 1. Using a term such as "carpentry" does not imply that certain construction activities must be performed by accredited or unionized individuals of a corresponding generic name, such as "carpenter." It also does not imply that requirements specified apply exclusively to tradespeople of the corresponding generic name.
- J. Experienced: When used with an entity, "experienced" means having successfully completed a minimum of two (2) previous projects similar in size and scope to this Project; being familiar with special requirements indicated; and having complied with requirements of authorities having jurisdiction.

1.4 CONFLICTING REQUIREMENTS

- A. General: If compliance with two (2) or more standards is specified and the standards establish different or conflicting requirements for minimum quantities or quality levels, comply with the most stringent requirement. Refer uncertainties and requirements that are different, but apparently equal, to Owner for a decision before proceeding.
- B. Minimum Quantity or Quality Levels: The quantity or quality level shown or specified shall be the minimum provided or performed. The actual installation may comply exactly with the minimum quantity or quality specified, or it may exceed the minimum within reasonable limits. To comply with these requirements, indicated numeric values are minimum or maximum, as appropriate, for the context of requirements. Refer uncertainties to Owner for a decision before proceeding.

1.5 TESTING SUBMITTALS

- A. Qualification Data: For testing agencies, as prescribed by Contract, but not provided by Owner shall demonstrate their capabilities and experience. Include proof of qualifications in the form of a recent report on the inspection of the testing agency by a recognized authority.
- B. Reports: Prepare and electronically submit to the Owner certified written reports that include the following:
 - 1. Date of issue.

- 2. Project title and number.
- 3. Name, address and telephone number of testing agency.
- 4. Dates and locations of samples and tests or inspections.
- 5. Names of individuals making tests and inspections.
- 6. Description of the Work and test and inspection method.
- 7. Identification of product and Specification Section.
- 8. Complete test or inspection data.
- 9. Test and inspection results and an interpretation of test results.
- 10. Record of temperature and weather conditions at time of sample taking and testing and inspecting.
- 11. Comments or professional opinion on whether tested or inspected Work complies with the Contract Document requirements.
- 12. Name and signature of laboratory inspector.
- 13. Recommendations on re-testing and re-inspecting.
- C. Permits, Licenses and Certificates: For Owner's records, submit copies of permits, licenses, certifications, inspection reports, releases, jurisdictional settlements, notices, receipts for fee payments, judgments, correspondence, records and similar documents, established for compliance with standards and regulations bearing on performance of the Work.

1.6 QUALITY ASSURANCE

- A. General: Qualifications paragraphs in this Article establish the minimum qualification levels required; individual Specification Sections specify additional requirements.
- B. Installer Qualifications: A firm or individual experienced in installing, erecting, or assembling work similar in material, design and extent to that indicated for this Project, whose work has resulted in construction with a record of successful in-service performance.
- C. Manufacturer Qualifications: A firm experienced in manufacturing products or systems similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- D. Fabricator Qualifications: A firm experienced in producing products similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.
- E. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated. Engineering services are defined as those performed for installations of the system, assembly or product that is similar to those indicated for this Project in material, design and extent.
- F. Specialists: Certain sections of the Specifications require that specific construction activities shall be performed by entities who are recognized experts in those operations. Specialists shall satisfy qualification requirements indicated and shall be engaged for the activities indicated.
 - 1. Requirement for specialists shall not supersede building codes and regulations governing the Work.

- G. Testing Agency Qualifications: An NRTL, an NVLAP, or an independent agency with the experience and capability to conduct testing and inspecting indicated, as documented according to ASTM E 548; and with additional qualifications specified in individual Sections; and where required by authorities having jurisdiction, that is acceptable to authorities.
 - 1. NRTL: A nationally recognized testing laboratory according to 29 CFR 1910.7.
 - 2. NVLAP: A testing agency accredited according to NIST's National Voluntary Laboratory Accreditation Program.
- H. Factory-Authorized Service Representative Qualifications: An authorized representative of manufacturer who is trained and approved by manufacturer to inspect installation of manufacturer's products that are similar in material, design and extent to those indicated for this Project.
- I. Mockups: Before installing portions of the Work requiring mockups, build mockups for each form of construction and finish required to comply with the following requirements, using materials indicated for the completed Work:
 - 1. Build mockups in location and of size indicated or, if not indicated, as directed by Owner.
 - 2. Notify Owner seven (7) calendar days in advance of dates and times when mockups will be constructed.
 - 3. Demonstrate the proposed range of aesthetic effects and workmanship.
 - 4. Obtain Owner's approval of mockups before starting work, fabrication or construction.
 - 5. Maintain mockups during construction in an undisturbed condition as a standard for judging the completed Work.
 - 6. Demolish and remove mockups when directed, unless otherwise indicated.
- J. Laboratory Mockups: Comply with requirements of pre-construction testing and those specified in individual Sections in Divisions 02 through 33.

1.7 QUALITY CONTROL

- A. Owner Responsibilities: Where quality-control services are indicated as Owner's responsibility, Owner will engage a qualified testing agency to perform these services.
 - 1. Owner will furnish Contractor with names, addresses and telephone numbers of testing agencies engaged and a description of types of testing and inspecting they are engaged to perform.
 - 2. Costs for retesting and re-inspecting construction that replaces or is necessitated by work that failed to comply with the Contract Documents will be charged to Contractor.
- B. Tests and inspections not explicitly assigned to Owner are Contractor's responsibility. Unless otherwise indicated, provide quality-control services specified and those required by authorities having jurisdiction. Perform quality-control services required of Contractor by authorities having jurisdiction, whether specified or not.
 - 1. Where services are indicated as Contractor's responsibility, engage a qualified testing agency to perform these quality-control services.
 - a. Contractor shall not employ same entity engaged by Owner, unless agreed to in writing by Owner.

- 2. Notify testing agencies at least twenty-four 24 hours in advance of time when Work that requires testing or inspecting will be performed.
- 3. Where quality-control services are indicated as Contractor's responsibility, electronically submit a certified written report, in duplicate, of each quality-control service to the Owner.
- 4. Testing and inspecting requested by Contractor and not required by the Contract Documents are Contractor's responsibility.
- 5. Submit additional copies of each written report directly to authorities having jurisdiction, when they so direct.
- C. Manufacturer's Field Services: Where indicated, engage a factory-authorized service representative to inspect field-assembled components and equipment installation, including service connections. Report results in writing as specified in Division 01 33 00 Section "Submittal Procedures."
- D. Re-testing/Re-inspecting: Regardless of whether original tests or inspections were Contractor's responsibility, provide quality-control services, including re-testing and re-inspecting, for construction that replaced Work that failed to comply with the Contract Documents.
- E. Testing Agency Responsibilities: Cooperate with Owner and Contractor in performance of duties. Provide qualified personnel to perform required tests and inspections.
 - 1. Notify Owner and Contractor promptly of irregularities or deficiencies observed in the Work during performance of its services.
 - 2. Determine the location from which test samples will be taken and in which onsite tests will be conducted.
 - 3. Conduct and interpret tests and inspections and state in each report whether tested and inspected work complies with or deviates from requirements.
 - 4. Electronically submit to the Owner a certified written report, in duplicate, of each test, inspection and similar quality-control service through Contractor.
 - 5. Do not release, revoke, alter, or increase the Contract Document requirements or approve or accept any portion of the Work.
 - 6. Do not perform any duties of Contractor.
- F. Associated Services: Cooperate with agencies performing required tests, inspections and similar quality-control services, and provide reasonable auxiliary services as requested. Notify agency sufficiently in advance of operations to permit assignment of personnel. Provide the following:
 - 1. Access to the Work.
 - 2. Incidental labor and facilities necessary to facilitate tests and inspections.
 - 3. Adequate quantities of representative samples of materials that require testing and inspecting. Assist agency in obtaining samples.
 - 4. Facilities for storage and field curing of test samples.
 - 5. Delivery of samples to testing agencies.
 - 6. Preliminary design mix proposed for use for material mixes that require control by testing agency.
 - 7. Security and protection for samples and for testing and inspecting equipment at Project site.

- G. Coordination: Coordinate sequence of activities to accommodate required qualityassurance and quality-control services with a minimum of delay and to avoid necessity of removing and replacing construction to accommodate testing and inspecting.
 - 1. Schedule times for tests, inspections, obtaining samples and similar activities.

1.8 SPECIAL TESTS AND INSPECTIONS

- A. Special Tests and Inspections: Owner will engage a qualified special inspector to conduct special tests and inspections required by authorities having jurisdiction as the responsibility of Owner, and as follows:
 - 1. Verifying that manufacturer maintains detailed fabrication and quality-control procedures and reviewing the completeness and adequacy of those procedures to perform the Work.
 - 2. Notifying Owner and Contractor promptly of irregularities and deficiencies observed in the Work during performance of its services.
 - 3. Submitting a certified written report of each test, inspection, and similar qualitycontrol service to Owner with copy to Contractor and to authorities having jurisdiction.
 - 4. Electronically submitting to the Owner a final report of special tests and inspections, which includes a list of unresolved deficiencies, at Substantial Completion.
 - 5. Interpreting tests and inspections and stating in each report whether tested and inspected work complies with or deviates from the Contract Documents.
 - 6. Re-testing and re-inspecting corrected work.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION

3.1 REPAIR AND PROTECTION

- A. General: On completion of testing, inspecting, sample taking and similar services, repair damaged construction and restore substrates and finishes.
 - 1. Provide materials and comply with installation requirements specified in other Specification Sections. Restore patched areas and extend restoration into adjoining areas with durable seams that are as invisible as possible.
 - 2. Comply with the Contract Document requirements for Division 01 73 29 Section "Cutting and Patching."
- B. Protect construction exposed by or for quality-control service activities.
- C. Repair and protection are Contractor's responsibility, regardless of the assignment of responsibility for quality-control services.

END OF SECTION 01 4000

SECTION 01 5000 TEMPORARY FACILITIES AND CONTROLS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 73 00 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes requirements for temporary utilities, support facilities, and security and protection facilities.
- B. See Division 01 Section "Execution" for progress cleaning requirements.
- C. See Divisions 02 through 33 Sections for temporary heat, ventilation, and humidity requirements for products in those Sections. Not all Sections will be used

1.3 DEFINITIONS

A. Permanent Enclosure: As determined by Architect, permanent or temporary roofing is complete, insulated and weathertight; exterior walls are insulated and weathertight; and all openings are closed with permanent construction or substantial temporary closures.

1.4 USE CHARGES

- A. General: Cost or use charges for temporary facilities shall be included in the Contract Sum. Allow other entities to use temporary services and facilities without cost, including, but not limited to, Owner's construction forces, Architect, testing agencies and authorities having jurisdiction.
- B. Water Service from Existing System: Water from Owner's existing water system is available for use with approval of Owner's Representative. Provide connections and extensions of services as required for construction operations. Contractor must notify Owner forty-eight (48) hours before use of water service.
- C. Electric Power Service from Existing System: Contractor is responsible for supplying power service and distribution as required for construction operations, unless other arrangements are made with approval of Owner's Representative.

1.5 QUALITY ASSURANCE

A. Electric Service: Comply with NECA, NEMA, and UL standards and regulations for temporary electric service. Install service to comply with NFPA 70.

1.6 PROJECT CONDITIONS

- A. Temporary Use of Existing Permanent Facilities: Contractor shall assume responsibility for operation, maintenance and protection of each existing permanent service during its use as a construction facility before Owner's acceptance, regardless of previously assigned responsibilities.
- B. Conditions of Use: The following conditions apply to use of temporary services and existing facilities by all parties engaged in the Work:
 - 1. Keep temporary services and existing facilities clean and neat.
 - 2. Relocate temporary services as required by progress of the Work.
 - 3. Provide temporary keys and lock cores throughout duration of Contractor's occupancy of Owner's space. Contractor to provide Owner's Representative with temporary construction keys matching construction cores installed for access.
 - a. When Contractor is given keys to KCHA property, Contractor will claim responsibility for the keys by signing for keys acquired. If Contractor loses keys, Contractor is responsible for rekeying all locks associated with lost key. Contractor is responsible for returning keys back to Owner's Representative when Work is completed.

PART 2 PRODUCTS

2.1 TEMPORARY FACILITIES

- A. Field Offices, General: Prefabricated or mobile units with serviceable finishes, temperature controls and foundations adequate for normal loading.
- B. Storage and Fabrication Sheds: Provide sheds sized, furnished and equipped to accommodate materials and equipment for construction operations.
- C. Contractor is responsible for security of Temporary Facilities.

2.2 EQUIPMENT

- A. Fire Extinguishers: Portable, UL rated; with class and extinguishing agent as required by locations and classes of fire exposures.
- B. HVAC Equipment: Unless Owner authorizes use of permanent HVAC system, provide vented, self-contained, liquid-propane-gas or fuel-oil heaters with individual space thermostatic control.
 - 1. Use of gasoline-burning space heaters, open-flame heaters or salamander-type heating units is prohibited.
 - 2. Heating Units: Listed and labeled for type of fuel being consumed, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
 - 3. Permanent HVAC System: If Owner authorizes use of permanent HVAC system for temporary use during construction, provide filter with MERV of 13 at each return air grille in system and remove and replace at end of construction.
- C. Self-Contained Toilet Units: Single-occupant units of chemical, aerated re-circulation, or combustion type; vented; fully-enclosed with a glass-fiber-reinforced polyester shell or similar nonabsorbent material.

- D. Drinking-Water Fixtures: Containerized, tap-dispenser, bottled-water, drinking-water units, including paper cup supply.
 - 1. Where power is accessible, provide electric water coolers to maintain dispensed water temperature at 45 to 55 degrees F.
- E. Electrical Outlets: Properly configured, NEMA-polarized outlets to prevent insertion of 110-to-120-V plugs into higher-voltage outlets; equipped with ground-fault circuit interrupters, reset button and pilot light.
- F. Power Distribution System Circuits: Where permitted, and overhead and exposed for surveillance, wiring circuits, not exceeding 125-V AC, 20-A rating, and lighting circuits may be nonmetallic sheathed cable.

PART 3 EXECUTION

3.1 INSTALLATION, GENERAL

- A. With Owner's approval, locate facilities where they will serve Project adequately and result in minimum interference with performance of the Work. Relocate and modify facilities as required by progress of the Work.
- B. Provide each facility ready for use when needed to avoid delay. Do not remove until facilities are no longer needed or are replaced by authorized use of completed permanent facilities.

3.2 TEMPORARY UTILITY INSTALLATION

- A. General: Install temporary service or connect to existing service.
 - 1. Arrange with utility company, Owner, and existing users for time when service can be interrupted, if necessary, to make connections for temporary services. Provide Owner with seventy-two (72) hour notice if disturbance is to occur to site staff or residents.
- B. Water Service: Connect to Owner's existing water service facilities. Clean and maintain water service facilities in a condition acceptable to Owner. At Substantial Completion, restore these facilities to condition existing before initial use.
- C. Sanitary Facilities: Provide temporary toilets, wash facilities and drinking water for use by construction personnel. Comply with requirements of authorities having jurisdiction for type, number, location, operation and maintenance of fixtures and facilities.
 - 1. Toilets: Use of Owner's existing toilet facilities will be permitted with Owner's approval, as long as facilities are cleaned and maintained daily. At Substantial Completion, restore these facilities to condition existing before initial use.
- D. Heating and Cooling: Provide temporary heating and cooling required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of low temperatures or high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed.

- 1. Maintain a minimum temperature of 50 degrees F in permanently enclosed portions of building for normal construction activities, and 65 degrees F for finishing activities and areas where finished Work has been installed.
- 2. Isolation of Work Areas in Occupied Facilities: Prevent dust, fumes and odors from entering occupied areas.
- E. Ventilation and Humidity Control: Provide temporary ventilation required by construction activities for curing or drying of completed installations or for protecting installed construction from adverse effects of high humidity. Select equipment that will not have a harmful effect on completed installations or elements being installed. Coordinate ventilation requirements to produce ambient condition required and minimize energy consumption.
- F. Electric Power Service: Provide electric power service and distribution system of sufficient size, capacity, and power characteristics required for construction operations.
 - 1. Connect temporary service to Owner's existing power source, as directed by Owner after receiving approval by Owner's Representative.
- G. Lighting: Provide temporary lighting with local switching that provides adequate illumination for construction operations, observations, inspections and traffic conditions.
 - 1. Install and operate temporary lighting that fulfills security and protection requirements without operating entire system.

3.3 SUPPORT FACILITIES INSTALLATION

- A. Waste Disposal Facilities: Provide waste-collection containers in sizes adequate to handle waste from construction operations. Comply with requirements of authorities having jurisdiction. Comply with Division 01 73 00 Section "Execution" for progress cleaning requirements. Contractor shall not use Owner's waste receptacles for any disposal.
- B. Parking: Use designated areas of Owner's existing parking areas for construction personnel upon Owner's approval.

3.4 SECURITY AND PROTECTION FACILITIES INSTALLATION

- A. Protection of Existing Facilities: Protect existing vegetation, equipment, structures, utilities and other improvements at Project site and on adjacent properties, except those indicated to be removed or altered. Repair damage to existing facilities.
- B. Environmental Protection: Provide protection, operate temporary facilities and conduct construction in ways and by methods that comply with environmental regulations and that minimize possible air, waterway and subsoil contamination or pollution or other undesirable effects.
- C. Security Enclosure and Lockup: Install substantial temporary enclosure around partially completed areas of construction. Provide lockable entrances to prevent unauthorized entrance, vandalism, theft and similar violations of security.
- D. Barricades, Warning Signs, and Lights: Comply with Owner's instructions for erecting structurally adequate barricades, including warning signs and lighting.

- E. Temporary Egress: Maintain temporary egress from existing occupied facilities as indicated and as required by Owner.
- F. Temporary Enclosures: Provide temporary enclosures for protection of construction, in progress and completed, from exposure, foul weather, other construction operations and similar activities. Provide temporary weathertight enclosure for building exterior.
 - 1. Where heating or cooling is needed and permanent enclosure is not complete, insulate temporary enclosures.
- G. Temporary Partitions: Provide floor-to-ceiling dustproof partitions to limit dust and dirt migration and to separate areas occupied by tenants from fumes and noise.
 - 1. Construct dustproof partitions with two (2) layers of 6-mil polyethylene sheet on each side. Overlap and tape full length of joints.
 - 2. Where fire-resistance-rated temporary partitions are indicated or are required by authorities having jurisdiction, construct partitions according to the rated assemblies.
 - 3. Seal joints and perimeter.
 - 4. Protect air-handling equipment.
 - 5. Provide walk-off mats at each entrance through temporary partition.
 - 6. Dust Control/Air handlers
- H. Temporary Fire Protection: Install and maintain temporary fire-protection facilities of types needed to protect against reasonably predictable and controllable fire losses. Comply with NFPA 241.
 - 1. Prohibit smoking on Owner's property.
 - 2. Supervise welding operations, combustion-type temporary heating units and similar sources of fire ignition according to requirements of authorities having jurisdiction.

3.5 OPERATION, TERMINATION AND REMOVAL

- A. Supervision: Enforce strict discipline in use of temporary facilities. To minimize waste and abuse, limit availability of temporary facilities to essential and intended uses.
- B. Maintenance: Maintain facilities in good operating condition until removal.
 - 1. Maintain operation of temporary enclosures, heating, cooling, humidity control, ventilation and similar facilities on a twenty-four (24) hour basis where required to achieve indicated results and to avoid possibility of damage.
- C. Temporary Facility Changeover: Do not change over from using temporary security and protection facilities to permanent facilities until Substantial Completion.
- D. Termination and Removal: Remove each temporary facility when need for its service has ended, when it has been replaced by authorized use of a permanent facility or no later than Substantial Completion. Complete or, if necessary, restore permanent construction that may have been delayed because of interference with temporary facility. Repair damaged Work, clean exposed surfaces and replace construction that cannot be satisfactorily repaired.
 - 1. Materials and facilities that constitute temporary facilities are property of Contractor. Owner reserves right to take possession of Project identification signs.

2. At Substantial Completion, clean and renovate permanent facilities used during construction period. Comply with final cleaning requirements specified in Division 01 77 00 Section "Closeout Procedures."

SECTION 01 6000 PRODUCT REQUIREMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for selection of products for use in Project; product delivery, storage and handling; manufacturers' standard warranties on products; special warranties; product substitutions; and comparable products.
- B. See Division 01 77 00 Section "Closeout Procedures" for submitting warranties for Contract closeout.
- C. See Divisions 02 through 33 Sections for specific requirements for warranties on products and installations specified to be warranted. Not all Sections will be used.

1.3 DEFINITIONS

- A. Products: Items purchased for incorporating into the Work, whether purchased for Project or taken from previously purchased stock. The term "product" includes the terms "material," "equipment," "system," and terms of similar intent.
 - 1. Named Products: Items identified by manufacturer's product name, including make or model number or other designation shown or listed in manufacturer's published product literature that is current as of date of the Contract Documents.
 - 2. New Products: Items that have not previously been incorporated into another project or facility, except that products consisting of recycled-content materials are allowed, unless explicitly stated otherwise. Products salvaged or recycled from other projects are not considered new products.
 - 3. Comparable Product: Product that is demonstrated and approved through submittal process, or where indicated as a product substitution, to have the indicated qualities related to type, function, dimension, in-service performance, physical properties, appearance and other characteristics that equal or exceed those of specified product.
- B. Substitutions: Changes in products, materials, equipment and methods of construction from those required by the Contract Documents and proposed by Contractor.
- C. Basis-of-Design Product Specification: Where a specific manufacturer's product is named and accompanied by the words "basis of design," including make or model number or other designation, to establish the significant qualities related to type, function, dimension, in-service performance, physical properties, appearance and other characteristics for purposes of evaluating comparable products of other named manufacturers.

1.4 SUBMITTALS

- A. Substitution Requests: Electronically submit three (3) copies of each request for consideration to the Owner. Identify product or fabrication or installation method to be replaced. Include Specification Section number and title and Drawing numbers and titles.
 - 1. Documentation: Show compliance with requirements for substitutions and the following, as applicable:
 - a. Statement indicating why specified material or product cannot be provided.
 - b. Coordination information, including a list of changes or modifications needed to other parts of the Work and to construction performed by Owner and separate contractors, which will be necessary to accommodate proposed substitution.
 - c. Detailed comparison of significant qualities of proposed substitution with those of the Work specified. Significant qualities may include attributes such as performance, weight, size, durability, visual effect and specific features and requirements indicated.
 - d. Product Data, including drawings and descriptions of products and fabrication and installation procedures.
 - e. Samples, where applicable or requested.
 - f. List of similar installations for completed projects with project names and addresses and the names and addresses of Architects and Owners.
 - g. Material test reports from a qualified testing agency indicating and interpreting test results for compliance with requirements indicated.
 - h. Research/evaluation reports evidencing compliance with building code in effect for Project, from a model code organization acceptable to authorities having jurisdiction.
 - i. Detailed comparison of Contractor's Final Project Schedule using proposed substitution with products specified for the Work, including effect on the overall Contract Time. If specified product or method of construction cannot be provided within the Contract Time, include letter from manufacturer, on manufacturer's letterhead, stating lack of availability or delays in delivery.
 - j. Cost information, including a proposal of change, if any, in the Contract Sum.
 - k. Contractor's certification that proposed substitution complies with requirements in the Contract Documents and is appropriate for applications indicated.
 - 1. Contractor's waiver of rights to additional payment or time that may subsequently become necessary because of failure of proposed substitution to produce indicated results.
 - Owner's Action: If necessary, the Owner will request additional information or documentation for evaluation within five (5) calendar days of receipt of a request for substitution. Owner will notify Contractor of acceptance or rejection of proposed substitution within ten (10) calendar days of receipt of request, or five (5) calendar days of receipt of additional information or documentation, whichever is later.
 - a. Form of Acceptance: Signed and Approved Substitution Request Form.

B. Basis-of-Design Product Specification Submittal: Comply with requirements in Division 01 Section "Submittal Procedures." Show compliance with requirements.

1.5 QUALITY ASSURANCE

A. Compatibility of Options: If Contractor is given option of selecting between two (2) or more products for use on Project, product selected shall be compatible with products previously selected, even if previously selected products were also options.

1.6 PRODUCT DELIVERY, STORAGE, AND HANDLING

- A. Deliver, store and handle products using means and methods that will prevent damage, deterioration and loss, including theft. Comply with manufacturer's written instructions.
- B. Delivery and Handling:
 - 1. Schedule delivery to minimize long-term storage at Project site and to prevent overcrowding of construction spaces.
 - 2. Coordinate delivery with installation time to ensure minimum holding time for items that are flammable, hazardous, easily damaged or sensitive to deterioration, theft and other losses.
 - 3. Deliver products to Project site in an undamaged condition in manufacturer's original sealed container or other packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
 - 4. Inspect products on delivery to ensure compliance with the Contract Documents and to ensure that products are undamaged and properly protected.
- C. Storage:
 - 1. Store products to allow for inspection and measurement of quantity or counting of units.
 - 2. Store materials in a manner that will not endanger Project structure.
 - 3. Store products that are subject to damage by the elements, under cover in a weathertight enclosure above ground, with ventilation adequate to prevent condensation.
 - 4. Store cementitious products and materials on elevated platforms.
 - 5. Store foam plastic from exposure to sunlight, except to extent necessary for period of installation and concealment.
 - 6. Comply with product manufacturer's written instructions for temperature, humidity, ventilation and weather-protection requirements for storage.
 - 7. Protect stored products from damage and liquids from freezing.

1.7 PRODUCT WARRANTIES

- A. Warranties specified in other Sections shall be in addition to, and run concurrent with, other warranties required by the Contract Documents. Manufacturer's disclaimers and limitations on product warranties do not relieve Contractor of obligations under requirements of the Contract Documents.
 - 1. Manufacturer's Warranty: Pre-printed written warranty published by individual manufacturer for a particular product and specifically endorsed by manufacturer to Owner.

- 2. Special Warranty: Written warranty required by or incorporated into the Contract Documents, either to extend time limit provided by manufacturer's warranty or to provide more rights for Owner.
- B. Special Warranties: Prepare a written document that contains appropriate terms and identification, ready for execution. Electronically submit a draft for approval before final execution to the Owner.
 - 1. Manufacturer's Standard Form: Modified to include Project-specific information and properly executed.
 - 2. Specified Form: When specified forms are included with the Specifications, prepare a written document using appropriate form properly executed.
 - 3. Refer to Divisions 2 through 33 Sections for specific content requirements and particular requirements for submitting special warranties. Not all Sections will be used.
- C. Submittal Time: Comply with requirements in Division 01 Section "Closeout Procedures."
- PART 2 PRODUCTS

2.1 PRODUCT SELECTION PROCEDURES

- A. General Product Requirements: Provide products that comply with the Contract Documents, that are undamaged and, unless otherwise indicated, that are new at time of installation.
 - 1. Provide products complete with accessories, trim, finish, fasteners and other items needed for a complete installation and indicated use and effect.
 - 2. Standard Products: If available, and unless custom products or nonstandard options are specified, provide standard products of types that have been produced and used successfully in similar situations on other projects.
 - 3. Owner reserves the right to limit selection to products with warranties not in conflict with requirements of the Contract Documents.
 - 4. Where products are accompanied by the term "as selected," Owner will make selection.
 - 5. Where products are accompanied by the term "match sample," sample to be matched is Owner's.
 - 6. Descriptive, performance and reference standard requirements in the Specifications establish "salient characteristics" of products.
- B. Product Selection Procedures:
 - 1. Products: Where Specifications include a list of names of both products and manufacturers, provide one (1) of the products listed or equal product that complies with requirements.
 - 2. Manufacturers: Where Specifications include a list of manufacturers' names, provide a product by one (1) of the manufacturers listed or equal manufacturer that complies with requirements.
 - 3. Available Products: Where Specifications include a list of names of both products and manufacturers, provide one (1) of the products listed, or a equal product. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed "or Equal" product.

- 4. Available Manufacturers: Where Specifications include a list of manufacturers, provide a product by one (1) of the manufacturers listed, or an unnamed manufacturer, that complies with requirements. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed manufacturer.
- 5. Product Options: Where Specifications indicate that sizes, profiles and dimensional requirements on Drawings are based on a specific product or system, provide the specified product or system. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product or system.
- 6. Basis-of-Design Product: Where Specifications name a product and include a list of manufacturers, provide the specified product or a comparable product by one (1) of the other named manufacturers. Drawings and Specifications indicate sizes, profiles, dimensions and other characteristics that are based on the product named. Comply with provisions in Part 2 "Product Substitutions" Article for consideration of an unnamed product by the other named manufacturers.
- 7. Visual Matching Specification: Where Specifications require matching an established Sample, select a product that complies with requirements and matches Owner's sample. Owner's decision will be final on whether a proposed product matches.
 - a. If no product available within specified category matches and complies with other specified requirements, comply with provisions in Part 2 "Product Substitutions" Article for proposal of product.
- 8. Visual Selection Specification: Where Specifications include the phrase "as selected from manufacturer's colors, patterns and textures" or a similar phrase, select a product that complies with other specified requirements.
 - a. Standard Range: Where Specifications include the phrase "standard range of colors, patterns, textures" or similar phrase, Owner will select color, pattern, density or texture from manufacturer's product line that does not include premium items.
 - b. Full Range: Where Specifications include the phrase "full range of colors, patterns, textures" or similar phrase, Owner will select color, pattern, density or texture from manufacturer's product line that includes both standard and premium items.

2.2 PRODUCT SUBSTITUTIONS

- A. Timing: Owner will consider requests for substitutions if received within sixty (60) days after the Notice to Proceed. Requests received after that time may be considered or rejected at discretion of Owner.
- B. Conditions: Owner will consider Contractor's request for substitution when the following conditions are satisfied. If the following conditions are not satisfied, Owner will return requests without action, except to record noncompliance with these requirements:
 - 1. Requested substitution offers Owner a substantial advantage in cost, time, energy conservation, or other considerations, after deducting additional responsibilities Owner must assume. Owner's additional responsibilities may include compensation to Architect for redesign and evaluation services, increased cost of other construction by Owner and similar considerations.
 - 2. Requested substitution does not require extensive revisions to the Contract Documents.

- 3. Requested substitution is consistent with the Contract Documents and will produce indicated results.
- 4. Substitution request is fully documented and properly submitted.
- 5. Requested substitution will not adversely affect Contractor's Final Project Schedule.
- 6. Requested substitution has received necessary approvals of authorities having jurisdiction.
- 7. Requested substitution is compatible with other portions of the Work.
- 8. Requested substitution has been coordinated with other portions of the Work.
- 9. Requested substitution provides specified warranty.

PART 3 EXECUTION (Not Used)

SECTION 01 7300 EXECUTION

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes general procedural requirements governing execution of the Work including, but not limited to, the following:
 - 1. Construction layout.
 - 2. General installation of products.
 - 3. Progress cleaning.
 - 4. Starting and adjusting.
 - 5. Protection of installed construction.
 - 6. Correction of the Work.
- B. See Division 01 Section "Closeout Procedures" for submitting final property survey with Project Record Documents, recording of Owner-accepted deviations from indicated lines and levels, and final cleaning.

1.3 SUBMITTALS

- A. Not Applicable
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION
- 3.1 EXAMINATION
 - A. Existing Conditions: The existence and location of site improvements, utilities and other construction indicated as existing are not guaranteed. Before beginning work, investigate and verify the existence and location of mechanical and electrical systems and other construction affecting the Work. Notify Owner of any discrepancies between plans and actual conditions on site.
 - 1. Before construction, verify the location and points of connection of utility services.
 - B. Acceptance of Conditions: Examine substrates, areas and conditions, with Installer or Applicator and Owner present where indicated, for compliance with requirements for installation tolerances and other conditions affecting performance. Record observations.
 - 1. Verify compatibility with and suitability of substrates, including compatibility with existing finishes or primers.

- 2. Examine roughing-in for mechanical and electrical systems to verify actual locations of connections before equipment and fixture installation.
- 3. Examine walls, floors and roofs for suitable conditions where products and systems are to be installed.
- 4. Proceed with installation only after unsatisfactory conditions have been corrected and approved by Owner. Proceeding with the Work indicates acceptance of surfaces and conditions.

3.2 PREPARATION

- A. Field Measurements: Take field measurements as required to fit the Work properly. Recheck measurements before installing each product. Where portions of the Work are indicated to fit to other construction, verify dimensions of other construction by field measurements before fabrication. Coordinate fabrication schedule with construction progress to avoid delaying the Work.
- B. Space Requirements: Verify space requirements and dimensions of items shown diagrammatically on Drawings.
- C. Review of Contract Documents and Field Conditions: Immediately on discovery of the need for clarification of the Contract Documents, submit a request for information to Owner, per Section 01 3100.
 - 1. It is the Contractor's responsibility to coordinate between the various Contract Documents, including the Drawings and Specifications, with neither superseding the other. In the event of conflicts or discrepancies among the Contract Documents, it is the Contractor's responsibility to seek clarification.
 - 2. Where conflicts and/or omissions have not been brought to the attention of the Owner, it is understood that the Contractor has made provisions in the bid for the most costly material or methods.

3.3 CONSTRUCTION LAYOUT

- A. Verification: Before proceeding to lay out the Work, verify layout information shown on Drawings, in relation to the property survey and existing benchmarks. If discrepancies are discovered, notify Owner promptly.
- B. General: Engage experienced layout engineers to lay out the Work using accepted surveying practices.
 - 1. Establish dimensions within tolerances indicated. Do not scale Drawings to obtain required dimensions.
 - 2. Inform installers of lines and levels to which they must comply.
 - 3. Check the location, level and plumb, of every major element as the Work progresses.
 - 4. Notify Owner when deviations from required lines and levels exceed allowable tolerances.

3.4 FIELD ENGINEERING

A. Reference Points: Locate existing permanent benchmarks, control points and similar reference points before beginning the Work. Preserve and protect permanent benchmarks and control points during construction operations.

3.5 INSTALLATION

- A. General: Locate the Work and components of the Work accurately, in correct alignment and elevation, as indicated.
 - 1. Make vertical work plumb and make horizontal work level.
 - 2. Where space is limited, install components to maximize space available for maintenance and ease of removal for replacement.
 - 3. Conceal pipes, ducts and wiring in finished areas unless otherwise indicated.
 - 4. Install materials in lengths that produce the minimum amount of joints.
- B. Comply with manufacturer's written instructions and recommendations for installing products in applications indicated.
- C. Install products at the time and under conditions that will ensure the best possible results. Maintain conditions required for product performance until Substantial Completion.
- D. Conduct construction operations so no part of the Work is subjected to damaging operations or loading in excess of that expected during normal conditions of occupancy.
- E. Tools and Equipment: Do not use tools or equipment that produces harmful noise and dust levels. Refer to Dust Control in the Scope of Work.
- F. Templates: Obtain and distribute to the parties involved templates for work specified to be factory prepared and field installed. Check Shop Drawings of other work to confirm that adequate provisions are made for locating and installing products to comply with indicated requirements.
- G. Attachments: Provide blocking and attachment plates, anchors and fasteners of adequate size and number to securely anchor each component in place, accurately located and aligned with other portions of the Work. Where size and type of attachments are not indicated, verify size and type required for load conditions.
 - 1. Mounting Heights: Where mounting heights are not indicated, mount components at heights directed by Owner.
 - 2. Allow for building movement, including thermal expansion and contraction.
 - 3. Coordinate installation of anchorages. Furnish setting drawings, templates and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.
- H. Joints: Make joints of uniform width. Where joint locations in exposed work are not indicated, submit proposed joint layout, for Owner's approval. Fit exposed connections together to form hairline joints.
 - 1. Use weather cuts, miters, back caulk as needed. Use lengths that minimize joints.
- I. Hazardous Materials: Use products, cleaners, and installation materials that are not considered hazardous.
 - 1. If required, Contractor must submit MSDS for all products to be used onsite to Owner for approval. Owner shall have seven (7) calendar days to review and approve/disapprove of the product.

2. If required, Contractor must submit a weekly schedule detailing when and where approved products will be used on an hour-by-hour basis. This schedule must be submitted by 9:00 AM on Wednesday of the week prior to the scheduled work week.

3.6 PROGRESS CLEANING

- A. General: Clean Project site and work areas daily, including common areas. Coordinate progress cleaning for joint-use areas where more than one installer has worked. Enforce requirements strictly. Dispose of materials lawfully in compliance with Section 01 7419 "Construction Waste Management and Disposal."
 - 1. Comply with requirements in NFPA 241 for removal of combustible waste materials and debris.
 - 2. Do not hold materials more than seven (7) calendar days during normal weather or three (3) calendar days if the temperature is expected to rise above 80 degrees F.
 - 3. Containerize hazardous and unsanitary waste materials separately from other waste. Mark containers appropriately and dispose of legally, according to regulations.
 - 4. Do not use Owner receptacles.
 - 5. Recycle as outlined in Waste Management Plan in Section 01 7419.
- B. Site: Maintain Project site free of waste materials and debris.
- C. Work Areas: Clean areas where work is in progress to the level of cleanliness necessary for proper execution of the Work.
 - 1. Remove liquid spills promptly.
 - 2. Where dust would impair proper execution of the Work, broom-clean or vacuum the entire work area, as appropriate.
- D. Installed Work: Keep installed work clean. Clean installed surfaces according to written instructions of manufacturer or fabricator of product installed, using only cleaning materials specifically recommended. If specific cleaning materials are not recommended, use cleaning materials that are not hazardous to health or property and that will not damage exposed surfaces.
- E. Concealed Spaces: Remove debris from concealed spaces before enclosing the space.
- F. Exposed Surfaces in Finished Areas: Clean exposed surfaces and protect as necessary to ensure freedom from damage and deterioration at time of Substantial Completion.
- G. Waste Disposal: Burying or burning waste materials on-site will not be permitted. Washing waste materials down sewers or into waterways will not be permitted.
- H. During handling and installation, clean and protect construction in progress and adjoining materials already in place. Apply protective covering where required to ensure protection from damage or deterioration at Substantial Completion.
- I. Clean and provide maintenance on completed construction as frequently as necessary through the remainder of the construction period. Adjust and lubricate operable components to ensure operability without damaging effects.

J. Limiting Exposures: Supervise construction operations to assure that no part of the construction, completed or in progress, is subject to harmful, dangerous, damaging or otherwise deleterious exposure during the construction period.

3.7 STARTING AND ADJUSTING

- A. Start equipment and operating components to confirm proper operation. Remove malfunctioning units, replace with new units and re-test.
- B. Adjust operating components for proper operation without binding. Adjust equipment for proper operation.
- C. Test each piece of equipment to verify proper operation. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.
- D. Manufacturer's Field Service: If a factory-authorized service representative is required to inspect field-assembled components and equipment installation, comply with qualification requirements in Division 01 04 00 Section "Quality Requirements."

3.8 PROTECTION OF INSTALLED CONSTRUCTION

- A. Provide final protection and maintain conditions that ensure installed Work is without damage or deterioration at time of Substantial Completion.
- B. Comply with manufacturer's written instructions for temperature and relative humidity.
- 3.9 CORRECTION OF THE WORK
 - A. Repair or remove and replace defective construction. Restore damaged substrates and finishes. Comply with requirements in Division 01 73 29 Section "Cutting and Patching."
 - 1. Repairing includes replacing defective parts, refinishing damaged surfaces, touching up with matching materials and properly adjusting operating equipment.
 - B. Restore permanent facilities used during construction as well as landscapes and hardscapes to their original condition.
 - C. Remove and replace damaged surfaces that are exposed to view if surfaces cannot be repaired without visible evidence of repair.
 - D. Repair components that do not operate properly. Remove and replace operating components that cannot be repaired.
 - E. Remove and replace chipped, scratched and broken glass or reflective surfaces.

SECTION 01 7329 CUTTING AND PATCHING

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes procedural requirements for cutting and patching.
- B. See Divisions 02 through 33 Sections for specific requirements and limitations applicable to cutting and patching individual parts of the Work. Not all Sections will be used.

1.3 QUALITY ASSURANCE

- A. Structural Elements: Do not cut and patch structural elements in a manner that could change their load-carrying capacity or load-deflection ratio.
- B. Operational Elements: Do not cut and patch operating elements and related components in a manner that results in reducing their capacity to perform as intended or that results in increased maintenance or decreased operational life or safety.
- C. Miscellaneous Elements: Do not cut and patch miscellaneous elements or related components in a manner that could change their load-carrying capacity, that results in reducing their capacity to perform as intended, or that results in increased maintenance or decreased operational life or safety.
- D. Visual Requirements:
 - 1. Unless indicated otherwise, patching, extending or matching shall be performed as necessary to make the Work complete, with all components matching and consistent.
 - 2. Do not cut and patch construction in a manner that results in visual evidence of cutting and patching. Do not cut and patch construction exposed on the exterior or in occupied spaces in a manner that would, in Owner's opinion, reduce the building's aesthetic qualities. Remove and replace construction that has been cut and patched in a visually unsatisfactory manner.
 - 3. Patching materials shall meet the requirements of the jurisdictional code authorities.
 - 4. All patching procedures shall be reviewed with the Owner prior to proceeding.

1.4 WARRANTY

A. Existing Warranties: Remove, replace, patch and repair materials and surfaces cut or damaged during cutting and patching operations, by methods and with materials so as not to void existing warranties.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General: Comply with requirements specified in other Sections.
- B. In-Place Materials: Use materials identical to in-place materials. For exposed surfaces, use materials that visually match in-place adjacent surfaces to the fullest extent possible.
 - If identical materials are unavailable or cannot be used, use materials that, when installed, will match the visual and functional performance of in-place materials.

PART 3 EXECUTION

3.1 EXAMINATION

1.

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching are to be performed.
 - 1. Compatibility: Before patching, verify compatibility with and suitability of substrates, including compatibility with in-place finishes or primers.
 - 2. Proceed with installation only after unsafe or unsatisfactory conditions have been corrected.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of Work to be cut.
- B. Protection: Protect in-place construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of Project that might be exposed during cutting and patching operations.
- C. Adjoining Areas: Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Cut, move or remove items as necessary for access to alterations and renovations work; replace and restore at completion.
- E. Contact the Owner when unsuitable materials not marked for removal such as rotted wood, rusted metals and deteriorated concrete and masonry are discovered.
- F. Remove debris and abandoned items from area and from concealed spaces.
- G. Prepare surfaces and remove surface finishes to provide for proper installation of new work and new finishes.

3.3 PERFORMANCE

A. General: Employ skilled workers to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.

- B. Cutting: Cut in-place construction by sawing, drilling, breaking, chipping, grinding and similar operations, including excavation, using methods least likely to damage elements retained or adjoining construction. Provide appropriate dust control while cutting through surfaces. If possible, review proposed procedures with original Installer; comply with original Installer's written recommendations.
 - 1. In general, use hand or small power tools designed for sawing and grinding, not hammering and chopping. Cut holes and slots as small as possible, neatly to size required and with minimum disturbance of adjacent surfaces. Temporarily cover openings when not in use.
 - 2. Finished Surfaces: Cut or drill from the exposed or finished side into concealed surfaces.
 - 3. Concrete and Masonry: Cut using a cutting machine, such as an abrasive saw or a diamond-core drill.
 - 4. Excavating and Backfilling: Comply with requirements in applicable Division 31 and 33 Sections (Sections may not be used) where required by cutting and patching operations.
 - 5. Proceed with patching after construction operations requiring cutting are complete.
- C. Patching: Patch construction by filling, repairing, refinishing, closing up and similar operations following performance of other Work. Patch with durable seams that are as invisible as possible. Provide materials and comply with installation requirements specified in other Sections.
 - 1. Inspection: Where feasible, test and inspect patched areas after completion to demonstrate integrity of installation.
 - 2. Exposed Finishes: Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. Floors and Walls: Where walls or partitions that are removed extend one finished area into another, patch and repair floor and wall surfaces in the new space. Provide an even surface of uniform finish, color, texture and appearance. Remove in-place floor and wall coverings and replace with new materials, if necessary, to achieve uniform color and appearance.
 - 4. Ceilings: Patch, repair or rehang in-place ceilings as necessary to provide an even-plane surface of uniform appearance.
 - 5. Exterior Building Enclosure: Patch components in a manner that restores enclosure to a weathertight condition.
- D. Trim existing doors as necessary to clear new floor finishes; refinish trimmed areas.
- E. Where existing items are indicated as cut or reconfigured, cap and finish all exposed edges to match the existing construction to remain. Provide new or relocated supports spaced to be consistent with the installation.
- F. Cleaning: Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty and similar materials.

SECTION 01 7419 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions, Project Documents, and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for the following:
 - 1. Salvaging of non-hazardous demolition and construction waste.
 - 2. Recycling of non-hazardous demolition and construction waste.
 - 3. Disposing of non-hazardous demolition and construction waste.

1.3 DEFINITIONS

- A. Construction Waste: All non-hazardous building and site materials or other nonhazardous solid waste resulting from construction, remodeling, renovation, repair or landclearing operations. Construction waste includes packaging and material that is recycled, reused, salvaged or disposed as garbage.
- B. Demolition Waste: All non-hazardous building and site materials or other non-hazardous solid waste resulting from demolition or selective demolition operations.
- C. Disposal: Removal off-site of demolition and construction waste and subsequent sale, recycling, reuse or deposit in landfill or incinerator acceptable to authorities having jurisdiction.
- D. Recycle: Recovery of demolition or construction waste for subsequent processing for the purpose of using the material in the manufacture of a new product.
 - 1. Source-Separated Recycling: The process of separating recyclable materials in separate containers as they are generated on the job-site. The separated materials are hauled directly to a recycling facility or transfer station.
 - 2. Co-mingled Recycling: The process of collecting mixed recyclable materials in one container on-site. The container is taken to a material recovery facility where materials are separated for recycling.
- E. Re-Use: Making use of a material without altering its form. Materials can be reused onsite or reused on other project off-site. Examples include, but are not limited to the following:
 - 1. Grinding of concrete for use as sub-base material.
 - 2. Chipping of land-clearing debris for use as mulch.

- F. Salvage: Recovery of demolition or construction waste and subsequent sale or re-use in another facility.
- G. Salvage and Re-use: Recovery of demolition or construction waste and subsequent incorporation into the Work.

1.4 PERFORMANCE GOALS

- A. General: Material from demolition projects shall be recycled or reused whenever practicable (RCW 39.04.135). Contractor to develop a waste management plan that results in end-of-Project rates for salvage/recycling of fifty (50%) percent by weight of total waste generated by the Work by one or a combination of the following:
 - 1. Salvage.
 - 2. Reuse.
 - 3. Source-separated Recycling.
 - 4. Co-mingled Recycling.
- B. Salvage/Recycle Goals: Owner's goal is to salvage and recycle as much non-hazardous demolition and construction waste as possible including the following materials:
 - 1. Cardboard.
 - 2. Clean dimensional wood.
 - 3. Metals: Material banding, stud trim, ductwork, piping, rebar, roofing, other trim, steel, iron, galvanized sheet steel, stainless steel, aluminum, copper, zinc, lead, brass, and bronze.
 - 4. Gypsum board.

1.5 SUBMITTALS

- A. Waste Management Plan: Submit three (3) copies of plan within seven (7) calendar days of date established for the Notice of Proceed.
- B. Waste Reduction Progress Reports: Electronically submit, concurrent with Final Application for Payment, the report to the Owner. Include separate reports for demolition and construction waste. Include the following information:
 - 1. Material category.
 - 2. Generation point of waste.
 - 3. Destination of waste.
 - 4. Total quantity of waste in tons.
 - 5. Quantity of waste salvaged, both estimated and actual in tons.
 - 6. Quantity of waste recycled, both estimated and actual in tons.
 - 7. Total quantity of waste recovered (salvaged plus recycled) in tons.
 - 8. Total quantity of waste recovered (salvaged plus recycled) as a percentage of total waste.
- C. Waste Reduction Calculations: Before request for Substantial Completion, electronically submit a copy of calculated end-of-Project rates for salvage, recycling, and disposal as a percentage of total waste generated by the Work to the Owner.
- D. Records of Donations: Indicate receipt and acceptance of salvageable waste donated to individuals and organizations. Indicate whether organization is tax exempt.

- E. Records of Sales: Indicate receipt and acceptance of salvageable waste sold to individuals and organizations. Indicate whether organization is tax exempt.
- F. Recycling and Processing Facility Records: Indicate receipt and acceptance of recyclable waste by recycling and processing facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices. If waste is taken to a facility that landfills and recycles, include facility record of recycling rate for the period of construction.
- G. Landfill and Incinerator Disposal Records: Indicate receipt and acceptance of waste by landfills and incinerator facilities licensed to accept them. Include manifests, weight tickets, receipts and invoices.

1.6 QUALITY ASSURANCE

- A. Regulatory Requirements: Conduct construction waste management activities in accordance with State of Washington RCW 70.95.240, Seattle Municipal Code Chapter 21.36 and all other applicable laws and ordinances.
- B. Review of the following publications and programs (request copies by calling King County Solid Waste Division at 206-477-4466)
 - 1. Construction Recycling Directory for Seattle/ King County.
 - 2. Contractors Guide: Save money and resources through job-site recycling and waste prevention.
 - 3. King County Solid Waste Division Report of Co-mingled Recycling Facilities (available at www.metrokc.gov/dnrp/swd/construction-recycling/comingled.asp)

1.7 WASTE MANAGEMENT PLAN

- A. General: Develop a plan consisting of waste identification, waste reduction work plan and cost/revenue analysis. Include separate sections in plan for demolition and construction waste. Indicate quantities by weight or volume, but use same units of measure throughout waste management plan.
- B. Waste Identification: Indicate anticipated types and quantities of demolition and construction waste generated by the Work. Include estimated quantities and assumptions for estimates.
- C. Waste Reduction Work Plan: List each type of waste and whether it will be salvaged, recycled or disposed of in landfill or incinerator. Include points of waste generation, total quantity of each type of waste, quantity for each means of recovery and handling and transportation procedures.
 - 1. Salvaged Materials for Reuse: For materials that will be salvaged and reused in this Project, describe methods for preparing salvaged materials before incorporation into the Work.
 - 2. Salvaged Materials for Sale: For materials that will be sold to individuals and organizations, include list of their names, addresses and telephone numbers.
 - 3. Salvaged Materials for Donation: For materials that will be donated to individuals and organizations, include list of their names, addresses and telephone numbers.

- 4. Recycled Materials: Include list of local receivers and processors and type of recycled materials each will accept. Include names, addresses and telephone numbers.
- 5. Disposed Materials: Indicate how and where materials will be disposed of. Include name, address and telephone number of each landfill and incinerator facility.
- 6. Handling and Transportation Procedures: Include method that will be used for separating recyclable waste including sizes of containers, container labeling and designated location on Project site where materials separation will be located.
- D. Cost/Revenue Analysis: Indicate total cost of waste disposal as if there was no waste management plan and net additional cost or net savings resulting from implementing waste management plan. Include the following:
 - 1. Total quantity of waste.
 - 2. Estimated cost of disposal (cost per unit). Include hauling and tipping fees and cost of collection containers for each type of waste.
 - 3. Total cost of disposal (with no waste management).
 - 4. Savings in hauling and tipping fees that are avoided.
 - 5. Handling and transportation costs. Include cost of collection containers for each type of waste.
 - 6. Net additional cost or net savings from waste management plan.
- PART 2 PRODUCTS (Not Used)
- PART 3 EXECUTION
- 3.1 PLAN IMPLEMENTATION
 - A. General: Implement waste management plan as approved by Owner. Provide handling, containers, storage, signage, transportation and other items as required to implement waste management plan during the entire duration of the Contract.
 - B. Waste Management Coordinator: Contractor shall be responsible for implementing, monitoring, and reporting status of waste management work plan.
 - C. Training: Train workers, subcontractors and suppliers on proper waste management procedures, as appropriate for the Work occurring at Project site.
 - 1. Distribute waste management plan to everyone concerned within one (1) day of submittal return. A hard copy should remain on site. Send the plan electronically to the Owner.
 - 2. Distribute waste management plan to entities when they first begin work on-site. Review plan procedures and locations established for salvage, recycling and disposal.
 - 3. The General Contractor will ensure that the waste plan is communicated to the crews and subcontractors on site. They will be informed of:
 - a. How materials should be separated, and why.
 - b. Where materials should go.
 - c. How often the materials will be collected and delivered to the appropriate facilities.
 - d. The importance of recycling, and KCHA's recycling goals for the project.

- D. Site Access and Temporary Controls: Conduct waste management operations to ensure minimum interference with roads, streets, walks, walkways and other adjacent occupied and used facilities.
 - 1. Designate and label specific areas on Project site necessary for separating materials that are to be salvaged, recycled, reused, donated and sold.
 - 2. Comply with Division 01 50 00 Section "Temporary Facilities and Controls" for controlling dust and dirt, environmental protection and noise control.
 - 3. Clearly label the recycling bins and waste containers on site.
 - 4. Post lists of recyclable and non-recyclable materials in many locations, in different languages.
 - 5. The General Contractor will provide feedback to the crew and subcontractors on the results of their efforts
 - E. To the greatest extent possible, include in material purchasing agreements a waste reduction provision requesting that materials and equipment be delivered in packaging made of recyclable material, that they reduce the amount of packaging, that packaging be taken back for reuse or recycling, and to take back all unused product. Ensure that subcontractors require the same provisions in their purchase agreements.

3.2 SALVAGING DEMOLITION WASTE

- A. Salvaged Items for Reuse in the Work:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until installation.
 - 4. Protect items from damage during transport and storage.
 - 5. Install salvaged items to comply with installation requirements for new materials and equipment. Provide connections, supports and miscellaneous materials necessary to make items functional for use indicated.
- B. Salvaged Items for Sale and Donation: Not permitted on Project site.
- C. Salvaged Items for Owner's Use:
 - 1. Clean salvaged items.
 - 2. Pack or crate items after cleaning. Identify contents of containers.
 - 3. Store items in a secure area until delivery to Owner.
 - 4. Transport items to Owner's designated off-site storage area.
 - 5. Protect items from damage during transport and storage.

3.3 RECYCLING DEMOLITION AND CONSTRUCTION WASTE, GENERAL

- A. General: Recycle paper and beverage containers used by on-site workers.
- B. Recycling Receivers and Processors: The list below is provided for information only; available recycling receivers and processors include, but are not limited to, the following:
 - 1. Washington State Department of Ecology, Recycling, Northwest Region 425-649-7000.
 - 2. Industrial Materials Exchange (IMEX), Hazardous Waste Management Program, King County, Washington.

- 3. The "Recycling Plus Program Manual" published by the Washington State Clean Washington Center can be used to develop a job site reduction program. The manual includes a job-site recycling worksheet and form, tips on waste reduction, and other technical assistance. The manual also includes sample language for waste reduction requirements for subcontractors' agreements, as well as sample provision for a full-service recycling agreement.
- 4. LEED Reference Guide, Construction Waste Management section.
- 5. Recovery 1 is a resource recovery, recycling and research facility dedicated to developing sustainable waste management systems. www.recovery1.com or by phone at 800-949-5852.
- 6. Total Reclaim offers a wide variety of innovative environmental services for management of electronics and other hard to handle materials, including fluorescent lamps, refrigerant gases and appliances. www.totalreclaim.com or by phone 206-343-7443.
- 7. "Contractors' Guide for Preventing Waste and Recycling" <u>https://kingcounty.gov/~/media/depts/dnrp/solid-waste/construction-recycling/documents/ConGuide.ashx?la=en</u>
- 8. "Seattle/King County Construction Recycling Directory." <u>https://kingcounty.gov/depts/dnrp/solid-waste/programs/green-building/county-green-building.aspx</u>
- C. Recycling Incentives: Revenues, savings, rebates, tax credits and other incentives received for recycling waste materials shall accrue to Owner.
- D. Procedures: Separate recyclable waste from other waste materials, trash and debris. Separate recyclable waste by type at Project site to the maximum extent practical.
 - 1. Provide appropriately marked containers or bins for controlling recyclable waste until they are removed from Project site. Include list of acceptable and unacceptable materials at each container and bin.
 - a. Inspect containers and bins for contamination and remove contaminated materials if found.
 - 2. Stockpile processed materials on-site without intermixing with other materials. Place, grade and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 3. Stockpile materials away from construction area. Do not store within drip line of remaining trees.
 - 4. Store components off the ground and protect from the weather.
 - 5. Remove recyclable waste off Owner's property and transport to recycling receiver or processor.

3.4 RECYCLING DEMOLITION WASTE

- A. Wood Materials: Sort and stack members according to size, type and length. Separate lumber, engineered wood products, panel products and treated wood materials.
- B. Metals: Separate metals by type.
 1. Structural Steel: Stack members according to size, type of member and length.
 2. Remove and dispose of bolts, nuts, washers and other rough hardware.
- C. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location. Remove edge trim and sort with other metals. Remove and dispose of fasteners.

- D. Equipment: Drain tanks, piping, and fixtures. Seal openings with caps or plugs. Protect equipment from exposure to weather.
- E. Plumbing Fixtures: Separate by type and size.
- F. Piping: Reduce piping to straight lengths and store by type and size. Separate supports, hangers, valves, sprinklers and other components by type and size.
- G. Lighting Fixtures: Separate lamps by type and protect from breakage.
- H. Electrical Devices: Separate switches, receptacles, switchgear, transformers, meters, panelboards, circuit breakers and other devices by type.
- I. Conduit: Reduce conduit to straight lengths and store by type and size.

3.5 RECYCLING CONSTRUCTION WASTE

- A. Packaging:
 - 1. Cardboard and Boxes: Break down packaging into flat sheets. Bundle and store in a dry location.
 - 2. Polystyrene Packaging: Separate and bag materials.
 - 3. Pallets: As much as possible, require deliveries using pallets to remove pallets from Project site. For pallets that remain on-site, break down pallets into component wood pieces and comply with requirements for recycling wood.
 - 4. Crates: Break down crates into component wood pieces and comply with requirements for recycling wood.
- B. Wood Materials:
 - 1. Clean Cut-Offs of Lumber: Grind or chip into small pieces.
 - 2. Clean Sawdust: Bag sawdust that does not contain painted or treated wood.
- C. Gypsum Board: Stack large clean pieces on wood pallets and store in a dry location.
 - 1. Clean Gypsum Board: Grind scraps of clean gypsum board using small mobile chipper or hammer mill. Screen out paper after grinding.

3.6 DISPOSAL OF WASTE

- A. General: Except for items or materials to be salvaged, recycled or otherwise reused, remove waste materials from Project site and legally dispose of them in a landfill or incinerator acceptable to authorities having jurisdiction.
 - 1. Except as otherwise specified, do not allow waste materials that are to be disposed of accumulate on-site.
 - 2. Remove and transport debris in a manner that will prevent spillage on adjacent surfaces and areas.
- B. Burning: Do not burn waste materials.
- C. Disposal: Transport waste materials off Owner's property and legally dispose of them.



Waste Disposal and Recycling Data Form

The resource conservation program at KCHA tracks the disposal and recycling data for all KCHA activities. These includes all of the waste and recycling generated by residents, food composting, yard waste composting, unit-improvement waste, illegal dumping waste, and all waste created during the construction and demolition process. Our goals for all of these areas are:

- 1. Track the diversion of our waste and improve when possible
- 2. Meet KCHA recycling goals.

Please provide estimates, to the best of your ability, about the projected waste being generated on this project as well as how much of that waste is being recycled vs disposed. If estimates aren't possible, then we will need this information at project close-out.

Project Name:	Northwood Square Site and Storage	
Project Address:	529 8th Street N.E., Auburn, WA 98002	
Work Order No.:	1332	Job No.: 467.2

DESCRIPTION	WEIGHT	QUANTITY (Circle One)		
Total Waste Generated**		Lbs.	CY	Tons
Waste Disposed		Lbs.	CY	Tons
Waste Recycled		Lbs.	CY	Tons
**Waste Disposed plus Waste Recycled should equal Total Waste Generated				
What % of the total waste do you estimate you will recycle?				

The following tables identify materials expected on this project, the quantities generated, whether they will be disposed or recycled, and what facility they will be disposed or recycled at.

DEMOLITION PHASE				
MATERIAL	QUANTITY Lbs./CY/Tons	DISPOSAL / RECYCLE? (CIRCLE ONE)		DISPOSAL OR RECYCLING FACILITY
		Disposal	Recycle	

Example: Roofing, 3 tons, Recycle, DTG Recycle

CONSTRUCTION PHASE				
MATERIAL	QUANTITY Lbs./CY/Tons	DISPOSAL / RECYCLE? (CIRCLE ONE)		DISPOSAL OR RECYCLING FACILITY
		Disposal	Recycle	

Example: Misc. Con. Mat., 30 cy, Recycle, Waste Management

SECTION 01 7700 CLOSEOUT PROCEDURES

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for contract closeout, including, but not limited to, the following:
 - 1. Inspection procedures.
 - 2. Warranties.
 - 3. Final cleaning.
- B. See the Owner-Contractor Contract for requirements for Applications for Payment for Substantial and Final Completion.
- C. See Division 01 7839 Section "Project Record Documents" for submitting Record Drawings, Record Specifications and Record Product Data.
- D. See Division 01 7823 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- E. See Divisions 02 through 33 Sections for specific closeout and special cleaning requirements for the Work in those Sections. Not all Sections will be used.

1.3 SUBSTANTIAL COMPLETION (Refer to Article 9.8 AIA A201-2017)

- A. Preliminary Procedures: Before requesting inspection for determining date of Substantial Completion, complete the following. List items below that are incomplete in request.
 - 1. Prepare a list of items to be completed and corrected (punch list), the value of items on the list, and reasons why the Work is not complete.
 - 2. Advise Owner of pending insurance changeover requirements.
 - 3. Submit specific warranties, workmanship bonds, maintenance service agreements, final certifications and similar documents (to be included in O&M Manuals).
 - 4. Obtain and submit to Owner, the releases permitting Owner unrestricted use of the Work and access to services and utilities. Include occupancy permits, operating certificates, and similar releases.
 - 5. Prepare and submit Project Record Documents, operation and maintenance manuals, damage or settlement surveys, property surveys and similar final record information to the Owner.
 - 6. Deliver tools, spare parts, extra materials and similar items to location designated by Owner. Label with manufacturer's name and model number where applicable.
 - 7. Make final changeover of permanent locks and deliver keys to Owner. Advise Owner's personnel of changeover in security provisions.

- 8. Complete startup testing of systems.
- 9. Submit test/adjust/balance records to the Owner.
- Terminate and remove temporary facilities from Project site, along with 10. mockups, construction tools and similar elements.
- Advise Owner of changeover in heat and other utilities. 11.
- 12. Submit changeover information related to Owner's occupancy, use, operation and maintenance.
- Complete final cleaning requirements, including touchup painting. 13.
- Touch up and otherwise repair and restore marred exposed finishes to eliminate 14. visual defects.
- 15. Provide training on all newly installed systems by qualified personnel. Training will be presented to those that use the equipment, i.e. tenants site staff, facility users.
- Β. Inspection: Submit a written request for inspection for Substantial Completion to the Owner. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will prepare the Certificate of Substantial Completion after inspection or will notify Contractor of items, either on Contractor's list or additional items identified by Owner, that must be completed or corrected before certificate will be issued.
 - Re-inspection: Request re-inspection when the Work identified in previous 1. inspections as incomplete is completed or corrected.
 - 2. Results of completed inspection will form the basis of requirements for Final Completion.

CONTRACT COMPLETION (Refer to Article 9.10 in AIA A201-2017) 1.4

- A. Preliminary Procedures: Before requesting final inspection for determining date of Contract Completion, complete the following:
 - Submit a final Application for Payment according to the Owner-Contractor 1. Contract provisions to the Owner.
 - 2. Submit to the Owner, a certified copy of Owner's Substantial Completion inspection list of items to be completed or corrected (punch list), endorsed and dated by Owner. The certified copy of the list shall state that each item has been completed or otherwise resolved for acceptance.
 - 3. Submit evidence of final, continuing insurance coverage complying with insurance requirements to the Owner.
 - Instruct Owner's personnel in operation, adjustment and maintenance of products, 4. equipment and systems.
- B. Inspection: Submit a written request for final inspection for acceptance to the Owner. On receipt of request, Owner will either proceed with inspection or notify Contractor of unfulfilled requirements. Owner will notify Contractor of construction that must be completed or corrected before certificate will be issued.
 - Re-inspection: Request re-inspection when the Work identified in previous 1. inspections as incomplete is completed or corrected.

1.5 LIST OF INCOMPLETE ITEMS (PUNCH LIST)

A. Preparation: After Contractor has performed own Quality Control of the Work, Contractor will notify and schedule punch list inspection with Owner and other team

members. Owner will document items needing correction on Owner provided form listing area inspected and deficient item needing correction. Owner will provide Contractor with copy of punch list after inspection is completed. Owner has right to stop inspection due to quantity of repetitious items identified by Owner, or if Contractor has not performed own Quality Control of the Work

- 1. Organize list of spaces in sequential order.
- 2. Organize items applying to each space by major element, including categories for ceiling, individual walls, floors, equipment and building systems.
- 1.6 WARRANTIES (Refer to Article 3.5 in AIA A201-2017)
 - A. Submittal Time: Submit written warranties on request of Owner for designated portions of the Work where commencement of warranties other than date of Substantial Completion is indicated.
 - B. Organize warranty documents into an orderly sequence based on the table of contents of the Project Manual.
 - 1. Bind warranties and bonds in heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2-by-11-inch paper.
 - 2. Provide heavy paper dividers with plastic-covered tabs for each separate warranty. Mark tab to identify the product or installation. Provide a typed description of the product or installation, including the name of the product and the name, address and telephone number of Installer.
 - 3. Identify each binder on the front and spine with the typed or printed title "WARRANTIES," Project name and name of Contractor.
 - C. Provide additional copies of each warranty to include in operation and maintenance manuals.
- PART 2 PRODUCTS
- 2.1 MATERIALS
 - A. Cleaning Agents: Use cleaning materials and agents recommended by manufacturer or fabricator of the surface to be cleaned. Do not use cleaning agents that are potentially hazardous to health or property or that might damage finished surfaces.
- PART 3 EXECUTION
- 3.1 FINAL CLEANING
 - A. General: Provide final cleaning. Conduct cleaning and waste-removal operations to comply with local laws and ordinances and Federal and local environmental and anti-pollution regulations.
 - B. Cleaning: Employ experienced workers or professional cleaners for final cleaning. Clean each surface or unit to condition expected in an average commercial building cleaning and maintenance program. Comply with manufacturer's written instructions.

- 1. Complete the following cleaning operations before requesting inspection for certification of Substantial Completion for entire Project or for a portion of Project:
 - a. Clean Project site, yard and grounds, in areas disturbed by construction activities, including landscape development areas, of rubbish, waste material, litter and other foreign substances.
 - b. Sweep paved areas broom clean. Remove petrochemical spills, stains and other foreign deposits.
 - c. Remove tools, construction equipment, machinery and surplus material from Project site.
 - d. Clean exposed exterior and interior hard-surfaced finishes to a dirt-free condition, free of stains, films and similar foreign substances. Avoid disturbing natural weathering of exterior surfaces. Restore reflective surfaces to their original condition.
 - e. Sweep concrete floors broom clean in unoccupied spaces.
 - f. Vacuum carpet and similar soft surfaces, removing debris and excess nap; shampoo if visible soil or stains remain.
 - g. Clean transparent materials, including mirrors and glass in doors and windows. Remove glazing compounds and other noticeable, vision-obscuring materials. Replace chipped or broken glass and other damaged transparent materials. Polish mirrors and glass, taking care not to scratch surfaces.
 - h. Remove labels that are not permanent.
 - i. Touch up and otherwise repair and restore marred, exposed finishes and surfaces. Replace finishes and surfaces that cannot be satisfactorily repaired or restored or that already show evidence of repair or restoration.
 - 1) Do not paint over "UL" and similar labels, including mechanical and electrical nameplates.
 - j. Wipe surfaces of mechanical and electrical equipment and similar equipment. Remove excess lubrication, paint and mortar droppings and other foreign substances.
 - k. Replace parts subject to unusual operating conditions.
 - 1. Clean plumbing fixtures to a sanitary condition, free of stains, including stains resulting from water exposure.
 - m. Replace disposable air filters and clean permanent air filters. Clean exposed surfaces of diffusers, registers and grills.
 - n. Clean light fixtures, lamps, globes and reflectors to function with full efficiency. Replace burned-out bulbs and those noticeably dimmed by hours of use, and defective or noisy starters in fluorescent and mercury vapor fixtures to comply with requirements for new fixtures.
 - o. Leave Project clean and ready for occupancy.
- C. Comply with safety standards for cleaning. Do not burn waste materials. Do not bury debris or excess materials on Owner's property. Do not discharge volatile, harmful or dangerous materials into drainage systems. Remove waste materials from Project site and dispose of lawfully.

SECTION 01 7823 OPERATION AND MAINTENANCE DATA

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for preparing operation and maintenance manuals, including the following:
 - 1. Operation manuals for systems, subsystems, and equipment Maintenance manuals for the care and maintenance of products, materials, finishes, systems, and equipment.
- B. See Divisions 02 through 33 Sections for specific operation and maintenance manual requirements for the Work in those Sections. Every Division may not be used.

1.3 SUBMITTALS

- A. Manual: Submit one (1) electronic copy of each manual in final form at least fifteen (15) calendar days before final inspection. Owner will return copy with comments within fifteen (15) calendar days after final inspection.
 - Correct or modify each manual to comply with Owner's comments. Submit two
 (2) hard copies and one (1) electronic copy on Compact Disk of each corrected manual within fifteen (15) calendar days of receipt of Owner's comments.

PART 2 - PRODUCTS

2.1 MANUALS- GENERAL

- A. Organization: Unless otherwise indicated, organize each manual into a separate section for each system and subsystem, and a separate section for each piece of equipment not part of a system. Each manual shall contain a title page, table of contents and manual contents.
- B. Title Page: Enclose title page in transparent plastic sleeve. Include the following information:
 - 1. Subject matter included in manual.
 - 2. Name and address of Project.
 - 3. Name and address of Owner.
 - 4. Date of submittal.
 - 5. Name, address and telephone number of Contractor.
 - 6. Name and address of Architect.
 - 7. Cross-reference to related systems in other operation and maintenance manuals.

- C. Table of Contents: List each product included in manual, identified by product name, indexed to the content of the volume, and cross-referenced to Specification Section number in Project Manual.
- D. Manual Contents: Organize into sets of manageable size. Arrange contents alphabetically by system, subsystem and equipment. If possible, assemble instructions for subsystems, equipment and components of one (1) system into a single binder.
 - 1. Binders: Heavy-duty, 3-ring, vinyl-covered, loose-leaf binders, in thickness necessary to accommodate contents, sized to hold 8-1/2-by-11-inch paper; with clear plastic sleeve on spine to hold label describing contents and with pockets inside covers to hold folded oversize sheets.
 - a. Identify each binder on front and spine, with printed title "OPERATION AND MAINTENANCE MANUAL," Project title or name, and subject matter of contents. Indicate volume number for multiple-volume sets.
 - 2. Dividers: Heavy-paper dividers with plastic-covered tabs for each section. Mark each tab to indicate contents. Include typed list of products and major components of equipment included in the section on each divider, cross-referenced to Specification Section number and title of Project Manual.
 - 3. Protective Plastic Sleeves: Transparent plastic sleeves designed to enclose diagnostic software diskettes for computerized electronic equipment.
 - 4. Drawings: Attach reinforced, punched binder tabs on drawings and bind with text.
 - a. If oversize drawings are necessary, fold drawings to same size as text pages and use as foldouts.
 - b. If drawings are too large to be used as foldouts, fold and place drawings in labeled envelopes and bind envelopes in rear of manual. At appropriate locations in manual, insert typewritten pages indicating drawing titles, descriptions of contents and drawing locations.

2.2 OPERATION MANUALS

- A. Content: In addition to requirements in this Section, include operation data required in individual Specification Sections and equipment descriptions, operating standards, operating procedures, operating logs, wiring and control diagrams, and license requirements.
- B. Descriptions: Include the following:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Equipment identification with serial number of each component.
 - 4. Equipment function.
 - 5. Operating characteristics.
 - 6. Limiting conditions.
 - 7. Performance curves.
 - 8. Engineering data and tests.
 - 9. Complete nomenclature and number of replacement parts.
- C. Operating Procedures: Include start-up, break-in and control procedures; stopping and normal shutdown instructions; routine, normal, seasonal and weekend operating instructions; and required sequences for electric or electronic systems.

- D. Systems and Equipment Controls: Describe the sequence of operation and diagram controls as installed.
- E. Piped Systems: Diagram piping as installed and identify color-coding where required for identification.

2.3 PRODUCT MAINTENANCE MANUAL

- A. Content: Organize manual into a separate section for each product, material and finish. Include source information, product information, maintenance procedures, repair materials and sources, and warranties and bonds, as described below.
- B. Source Information: List each product included in manual; identify by product name and arrange to match manual's table of contents. For each product, list name, address and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Product Information: Include the following, as applicable:
 - 1. Product name and model number.
 - 2. Manufacturer's name.
 - 3. Color, pattern and texture.
 - 4. Material and chemical composition.
 - 5. Re-ordering information for specially manufactured products.
- D. Maintenance Procedures: Include manufacturer's written recommendations and inspection procedures, types of cleaning agents, methods of cleaning, schedule for cleaning and maintenance, and repair instructions.
- E. Repair Materials and Sources: Include lists of materials and local sources of materials and related services.
- F. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

2.4 SYSTEMS AND EQUIPMENT MAINTENANCE MANUAL

- A. Content: For each system, subsystem and piece of equipment not part of a system, include source information, manufacturers' maintenance documentation, maintenance procedures, maintenance and service schedules, spare parts list and source information, maintenance service contracts, and warranty and bond information, as described below.
- B. Source Information: List each system, subsystem, and piece of equipment included in manual; identify by product name and arrange to match manual's table of contents. For each product, list name, address and telephone number of Installer or supplier and maintenance service agent, and cross-reference Specification Section number and title in Project Manual.
- C. Manufacturers' Maintenance Documentation: Manufacturers' maintenance documentation including maintenance instructions, drawings and diagrams for maintenance, nomenclature of parts and components, and recommended spare parts for each component part or piece of equipment.

- D. Maintenance Procedures: Include test and inspection instructions, troubleshooting guide, disassembly instructions, and adjusting instructions that detail essential maintenance procedures.
- E. Maintenance and Service Schedules: Include service and lubrication requirements, list of required lubricants for equipment, and separate schedules for preventive and routine maintenance and service with standard time allotment.
- F. Spare Parts List and Source Information: Include lists of replacement and repair parts, with parts identified and cross-referenced to manufacturers' maintenance documentation and local sources of maintenance materials and related services.
- G. Maintenance Service Contracts: Include copies of maintenance agreements with name and telephone number of service agent.
- H. Warranties and Bonds: Include copies of warranties and bonds and lists of circumstances and conditions that would affect validity of warranties or bonds.

PART 3 EXECUTION

3.1 MANUAL PREPARATION

- A. Product Maintenance Manual: Assemble a complete set of maintenance data indicating care and maintenance of each product, material and finish incorporated into the Work.
- B. Operation and Maintenance Manuals: Assemble a complete set of operation and maintenance data indicating operation and maintenance of each system, subsystem and piece of equipment not part of a system.
- C. Manufacturers' Data: Where manuals contain manufacturers' standard printed data, include only sheets pertinent to product or component installed. Mark each sheet to identify each product or component incorporated into the Work. If data includes more than one (1) item in a tabular format, identify each item using appropriate references from the Contract Documents. Identify data applicable to the Work and delete references to information not applicable.
- D. Drawings: Prepare drawings supplementing manufacturers' printed data to illustrate the relationship of component parts of equipment and systems and to illustrate control sequence and flow diagrams. Coordinate these drawings with information contained in Record Drawings to ensure correct illustration of completed installation.
 - 1. Do not use original Project Record Documents as part of operation and maintenance manuals.
- E. Comply with Division 01 7700 Section "Closeout Procedures" for schedule for submitting operation and maintenance documentation.

SECTION 01 7839 PROJECT RECORD DOCUMENTS

PART 1 GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. This Section includes administrative and procedural requirements for Project Record Documents, including the following:
 - 1. Record Drawings.
 - 2. Record Specifications.
 - 3. Record Product Data.
- B. See Division 01 7823 Section "Operation and Maintenance Data" for operation and maintenance manual requirements.
- C. See Divisions 02 through 33 Sections for specific requirements for Project Record Documents of the Work in those Sections. Every Division may not be used.

1.3 CLOSEOUT SUBMITTALS

- A. Record Drawings: Submit to Owner PDF and CAD files of scanned record prints and three (3) sets of prints.
- B. Record Specifications: Submit annotated PDF electronic files of Project's Specifications, including addenda and contract modifications to the Owner.
- C. Record Product Data: Submit to the Owner, annotated PDF electronic files and directories of each submittal.
 - 1. Where record Product Data are required as part of operation and maintenance manuals, submit duplicate marked-up Product Data as a component of manual.
- D. Miscellaneous Record Submittals: See other Specification Sections for miscellaneous recordkeeping requirements and submittals in connection with various construction activities.
- E. Submit annotated PDF electronic files and directories of each submittal.

PART 2 PRODUCTS

2.1 RECORD DRAWINGS

A. Record Prints: Maintain one (1) set of black-line white prints of the Contract Drawings and Shop Drawings.

- 1. Preparation: Mark Record Prints to show the actual installation where installation varies from that shown originally. Require individual or entity who obtained record data, whether individual or entity is Installer, subcontractor or similar entity, to prepare the marked-up Record Prints.
 - a. Give particular attention to information on concealed elements that would be difficult to identify or measure and record later.
 - b. Record data as soon as possible after obtaining it. Record and check the markup before enclosing concealed installations.
- 2. Mark the Contract Drawings or Shop Drawings, whichever is most capable of showing actual physical conditions, completely and accurately. If Shop Drawings are marked, show cross-reference on the Contract Drawings.
- 3. Mark record sets with erasable, red-colored pencil. Use other colors to distinguish between changes for different categories of the Work at same location.
- 4. Note Field Authorization numbers, alternate numbers, Change Order numbers, and similar identification, where applicable.
- B. Format: Identify and date each Record Drawing; include the designation "PROJECT RECORD DRAWING" in a prominent location.
 - 1. Record Prints: Organize Record Prints and newly prepared Record Drawings into manageable sets. Bind each set with durable paper cover sheets. Include identification on cover sheets.
 - 2. Identification: As follows:
 - a. Project name.
 - b. Date.
 - c. Designation "PROJECT RECORD DRAWINGS."
 - d. Name of Architect.
 - e. Name of Contractor.

2.2 RECORD SPECIFICATIONS

- A. Preparation: Mark Specifications to indicate the actual product installation where installation varies from that indicated in Specifications, addenda and contract modifications.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Mark copy with the proprietary name and model number of products, materials, and equipment furnished, including substitutions and product options selected.
 - 3. Record the name of manufacturer, supplier, Installer and other information necessary to provide a record of selections made.
 - 4. Note related Change Orders, Record Product Data and Record Drawings where applicable.

2.3 RECORD PRODUCT DATA

- A. Preparation: Mark Product Data to indicate the actual product installation where installation varies substantially from that indicated in Product Data submittal.
 - 1. Give particular attention to information on concealed products and installations that cannot be readily identified and recorded later.
 - 2. Include significant changes in the product delivered to Project site and changes in manufacturer's written instructions for installation.

3. Note related Change Orders, Record Specifications and Record Drawings where applicable.

2.4 MISCELLANEOUS RECORD SUBMITTALS

- A. Assemble miscellaneous records required by other Specification Sections for miscellaneous record keeping and submittal in connection with actual performance of the Work. Bind or file miscellaneous records and identify each, ready for continued use and reference.
- PART 3 EXECUTION
- 3.1 RECORDING AND MAINTENANCE
 - A. Recording: Maintain one (1) copy of each submittal during the construction period for Project Record Document purposes. Post changes and modifications to Project Record Documents as they occur; do not wait until the end of Project.
 - B. Maintenance of Record Documents and Samples: Store Record Documents and Samples in the field office apart from the Contract Documents used for construction. Do not use Project Record Documents for construction purposes. Maintain Record Documents in good order and in a clean, dry, legible condition, protected from deterioration and loss. Provide access to Project Record Documents for Owner's reference during normal working hours.

G703 - Continuation Sheet A PEROFINANC: SITE NAME - PROJECT NAME; Contract No. CCxxxxx65 PEROF FROM: PEROF FROM: PEROF TROM: PEROF TRO	6 0.00	I RETAINAGE (AGGREGATE TO DATE) 1,450.00 676.17
A B C D E F G ITEM DESCRIPTION OF WORK SCHEDULED VALUE FROM PREVIOUS (G) THIS PERIOD MATERIALS PRESENTLY STORED TOTAL COMPLETED & STORED COMPLETED MATERIALS (G+C) TOTAL COMPLETED & STORED % Allowance & Contingencies 29,000.00 18,851.74 10,148.26 0.00 29,000.00 100.009 Close out 13,523.33 6,761.00 6,762.33 0.00 13,523.33 100.009 Mobilization 17,500.00 17,500.00 0.00 0.00 100.009 Desc Koatings 30,000.00 30,000.00 0.00 0.00 100.009 Deck Coatings 15,500.00 15,500.00 0.00 0.00 15,500.00 100.009 Roofir graing lad Windows 32,000.00 28,650.00 0.00 15,500.00 100.009 Deck Coatings 15,500.00 28,650.00 0.00 57,300.00 100.009 Roofirg incl Ladders and Hatches 57,300.00 28,650.00 0.00 43,000.00 0.00 <td>04.19.21 H BALANCE TO FINISH (C - G) 6 0.00</td> <td>(AGGREGATE TO DATE) 1,450.00</td>	04.19.21 H BALANCE TO FINISH (C - G) 6 0.00	(AGGREGATE TO DATE) 1,450.00
A B C D E F G ITEM DESCRIPTION OF WORK SCHEDULED FROM PREVIONS() THIS PERIOD MATERIALS TOTAL COMPLETED MATERIALS TOTAL (G+C) NO. DESCRIPTION OF WORK SCHEDULED FROM PREVIONS() THIS PERIOD STORED (G+C) (G+	04.19.21 H BALANCE TO FINISH (C - G) 6 0.00	(AGGREGATE TO DATE) 1,450.00
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Flameblock Labor 15,000.00 15,000.00 0.00 0.00 15,000.00 100.00%	6.00	110.00
	6 0.00	210.00
	6.00	750.00
Flameblock Materials 14,000.00 14,000.00 0.00 14,000.00 100.00%	6.00	700.00
Blinds 8,500.00 8,500.00 0.00 0.00 8,500.00 100.009	6.00	425.00
Electrical & Lighting Fixtures 12,800.00 12,800.00 0.00 12,800.00 100.00%	0.00	640.00
Exterior Painting 18,000.00 17,000.00 1,000.00 0.00 18,000.00 100.00%	0.00	900.00
Indirect Costs/Overhead/Profit 103,569.63 90,210.00 13,359.63 0.00 103,569.63 100.00%	6.00	5,178.48
CO 1 - Contingency (8,218.97) 0.00 (8,218.97) 0.00 (8,218.97) 100.00%		(410.95)
TOTALS 575,548.99 514,297.74 61,251.25 0.00 575,548.99 100.00%	0.00	28,777.45
5% RETAINAGE 28,777.45 25,714.89 3,062.56 0.00 28,777.45		
TOTALS LESS RETAINAGE 546,771.54 488,582.85 58,188.69 0.00 546,771.54	0.00	28,777.45
TOTAL BALANCE TO FINISH (H + I)		28,777.45
NET CHANGE ORDERS THIS PERIOD: (8,218.97) CHANGE ORDERS APPROVED THIS PERIOD (LIST C/O #s) 1		
NET C/O ADDITIONS (THIS PERIOD): 0.00 NET C/O DEDUCTIONS (THIS PERIOD): (8,218.97)		
TOTAL CHANGE ORDERS TO DATE: (8,218.97)		

Form G702

Total approved this month. (CO numbers listed below)

1

NET CHANGES by Change Order

#s:

Application and Certificate for Payment

TO OWNER:	King County Housing Author	•	SITE NAME		APPLICATION NO:	06 FINAL	Distribution to:
	Attn: Capital Construction Dept 700 Andover Park W. Suite C	. NAME / SCOPE OF WORK:	PRC	DJECT NAME	PERIOD TO: CONTRACT NO:	04.19.21 CCxxxxx65	OWNER: X ARCHITECT:
	Tukwila, WA 98188		110		CONTRACT DATE:	11/16/2020	CONTRACTOR:
FROM	CONTRACTOR NAME	VIA	ARC		NTP DATE:	11/16/2020	FIELD:
CONTRACTOR:	CONTRACTOR ADDRESS	ARCHITECT:	119 S. MAIN ST	7. SUITE 200	PROJECT NO:	215.1B	:
	CITY, STATE, ZIP		SEATTLE, WA	98104-2579	WORK ORDER NO:	1243	
CONTRACTOR'S APPLICATION FOR PAYMENT The undersigned Contractor certifies that to the best of the							
			4	belief the Work covered by			
	for payment, as shown below, in conn Form G703, is attached.	lection with the Contra	act.	Contract Documents, that all Certificates for Payment we			
	ACT SUM		\$583,767.96	shown herein is now due.	te issued and payments	received from the Owner,	, and that current payment
	CHANGE ORDERS		(\$8,218.97)	CONTRACTOR:			
	O DATE (Line 1 +/- 2)		\$575,548.99	By:		Date:	
4. TOTAL COMPLETED & STORED TO DATE (Column G on G703) \$575,548.99							
5. RETAINAGE:			· · · · ·	State of:			
a. 5 % of Completed Work			County of:				
(Column D + E on G703: \$575,548.99)= \$28,777.45			Subscribed and sworn to bef	ore			
b. 5 % of Stored Material				me this	day of		
(Column F on C	+ • • • • •		-	Notary Public:			
Total Retainage (Line	es 5a + 5b or Total in Column I of G7	/03)	\$28,777.45	My Commission expires:			
6. TOTAL EARNED LESS RETAINAGE			OWNER'S REPRES	SENTATIVE CER	RTIFICATE FOR P	AYMENT	
(Line 4 Less Li	ne 5 Total)	•	. ,	In accordance with the Cor	ntract Documents, based	d on on-site observations	and the data comprising
7. LESS PREVIOUS CERTIFICATES FOR PAYMENT			\$488,582.85	this application, the Own	-		
(Line 6 from prior Certificate)			Representative's knowledge				
8. CURRENT PAYMENT DUE			of the Work is in accordanc the AMOUNT CERTIFIED		cuments, and the Contrac	t is entitled to payment of	
9. BALANCE TO FINISH, INCLUDING RETAINAGE							
(Line 3 Less Line 6) \$28,777.45			AMOUNT CERTIFIED			\$58,188.69	
			(Attach explanation if amo Application and on the Cont				
CHANGE ORDER SUMMARY ADDITIONS DEDUCTIONS			DEDUCTIONS	OWNER'S REPRESENTATIVE	E		
Total changes approved in previous months by Owner \$0.00		\$0.00	By:		Date:		

\$0.00

\$0.00

TOTALS

(\$8,218.97)

(\$8,218.97)

(\$8,218.97)

This Certificate is not negotiable. The AMOUNT CERTIFIED is payable only to the Contractor named herein. Issuance, payment and acceptance of payment are without prejudice to any rights of the Owner or Contractor under this Contract.



GENERAL CONTRACTOR CERTIFICATION UPON APPLICATION FOR PAYMENT

OWNER:		King County Housing Authority	PAY REQUEST NUMBER:	06
GENERAL CONTRACTOR:		CONTRACTOR NAME	DATE: PERIOD FROM:	04.01.21
PROJECT NAME:		SITE NAME	THROUGH:	04.19.21
SCOPE	OF WORK:	PROJECT NAME	CONTRACT NUMBER:	CCxxxx65
1. ORIGINAL CONTRACT AMOUNT:		\$	583,767.96	
2. APPROVED CHANGE ORDER(S):		\$	(8,218.97)	
3. CURRENT CONTRACT AMOUNT:		\$	575,548.99	
4. AMOUNT OF PREVIOUS CERTIFICATES FOR PAYMENT:			\$	488,582.85
5.	AMOUNT OF CUP	RRENT CERTIFICATE FOR PAYMENT F	REQUEST: \$	58,188.69

By submitting the accompanying Application for Payment, the Contractor certifies, agrees and warrants to the Owner as follows:

- 1. The Contractor has made full payment to all laborers, subcontractors and suppliers of material and equipment whose charges were included in any prior Application for Payment, subject only to (a) retainage at the contract rate, and (b) the matters set forth below or on an attachment hereto.
- 2. The Contractor knows of no one making a claim for payment other than those included in the current Application for Payment, who will be paid when the current Application for Payment is paid by Owner, except as noted below or on an attachment hereto.
- 3. In consideration of payments made by Owner, the Contractor hereby waives and releases any and all claims and demands against Owner and the Project for all periods up to and including the period covered by this Application for Payment, subject only to (a) receipt of payment of the current Application, (b) applicable retainage, and (c) the matters set forth below or on an attachment hereto.

EXCEPTION(S) - DESCRIPTION:

GENERAL CONTRACTOR NAME:	CONTRACTOR NAME			
BY AUTHORIZED SIGNER:	PRINT NAME	TITLE	DATE	
State of Washington County of King				
I certify that I know or have satisfactory and said person acknowledged that (h uses and purposes mentioned in the ins	e/she) signed this instrument and ackno		appeared before me, nd voluntary act for the	
Signed before me on this	Day of		SEAL	
Notary Public in and for the S Residing at: My Commission Expires:	tate of Washington			

KCHA-CCDD / 4193 / 07-29-14

AMOUNT:



.

SUBSTITUTION REQUEST

Project:	Sub. Request #:	
	From:	
То:	Date:	
	A/E Project #: Contract For:	
Re:		
Specification Title:	Description:	
Section: Page:	Article / Paragraph:	
Proposed Substitution:		
Manufacturer:		
Address:	Phone:	
Trade Name:	Model No.:	
Installer:		
Address:	Phone:	
History: 🗌 New Product 🗌 2 - 5 years old	\Box 5 - 10 years old \Box More than 10 years old	
Differences between proposed substitution and specified	product:	
Point-by-point comparative data attached - REQUIRE	D BY A/E	
Reason for not providing specified item:		
Similar Installation:		
Project:	Architect:	
Address:	Owner:	
	Data Installed:	
Proposed substitution affects other parts of Work: \Box No	D Ves; Explain:	
Savings to Owner for accepting substitution:	(\$).	
Proposed substitution changes Contract Time: No Yes (If Yes): Add Deduct day		
*If Contract time is to be extended, a Change Order m	ust be prepared.	
Supporting Data Attached: Drawings Product	Data 🗌 Samples 🗌 Tests 🗌 Reports 🗌	



King County Housing Authority

SUBSTITUTION REQUEST

The Undersigned certifies:

- Proposed substitution has been fully investigated and determined to be equal or superior in all respects to specified product.
- Same warranty will be furnished for proposed substitution as for specified product.
- Same maintenance service and source of replacement parts, as applicable, is available.
- Proposed substitution will have no adverse effect on other trades and will not affect or delay progress schedule.
- Cost data as stated above is complete. Claims for additional costs related to accepted substitution which may subsequently become apparent are to be waived.
- Proposed substitution does not affect dimensions and functional clearances.
- Payment will be made for changes to building design, included A/E design, and construction costs caused by the substitution.
- Coordination, installation, and changes in the Work as necessary for accepted substitution will be complete in all respects.

Submitted by:	
Signed by:	
Firm:	
Address:	
Telephone:	
Attachments:	

A/E's Review and Action:

□ Substitution approved - Make submittals in accordance with Specification Section

□ Substitution approved as noted - Make submittals in accordance with Specification Section

Substitution rejected - Use specified materials.

 $\hfill\square$ Substitution Request received too late - Use specified materials.

Signed by:

Date:

DIVISION 00 - CONDITIONS OF THE CONTRACT

00 2213 SUPPLEMETARY INSTRUCTION TO BIDDERS

DIVISION 01 - GENERAL REQUIREMENTS

- 01 1000 SUMMARY
- 01 2600 CONTRACT MODIFICATION PROCEDURES
- 01 2900 PAYMENT PROCEDURES
- 01 3100 PROJECT MANAGEMENT AND COORDINATION
- 01 3200 CONSTRUCTION PROGRESS DOCUMENTATION
- 01 3300 SUBMITTAL PROCEDURES
- 01 4000 QUALITY REQUIREMENTS
- 01 5000 TEMPORARY FACILITIES AND CONTROLS
- 01 6000 PRODUCT REQUIREMENTS
- 01 7300 EXECUTION
- 01 7329 CUTTING AND PATCHING
- 01 7419 CONSTRUCTION WASTE MANAGEMENT AND DISPOSAL
- 01 7700 CLOSEOUT PROCEDURES
- 01 7823 OPERATION AND MAINTENANCE DATA
- 01 7839 PROJECT RECORD DOCUMENTS
- ****** SUBSTITUTION REQUEST FORM-KCHA

DIVISION 02 – EXISTING CONDITIONS

02 41 00 SELECTIVE DEMOLITION

DIVISION 03 – CONCRETE

03 30 00 CAST-IN-PLACE CONCRETE

- DIVISION 05 METAL
- 05 05 13 SHOP APPLIED COATINGS
- 05 50 00 METAL FABRICATIONS
- 05 52 00 METAL RAILINGS

DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES

- 06 10 00 ROUGH CARPENTRY
- 06 16 00 SHEATHING

DIVISION 07 – THERMAL AND MOISTURE PROTECTION

- 07 12 13 BUILT-UP MODIFIED ASPHALT SHEET WATERPROOFING
- 07 25 00 WEATHER RESISTANT BARRIER
- 07 31 00 LAMINATED FIBERGLASS SHINGLES
- 07 46 46 FIBER CEMENT SIDING AND TRIM
- 07 62 00 SHEET METAL FLASHING AND TRIM
- 07 92 00 JOINT SEALANTS

DIVISION 08 – OPENINGS

- 08 16 13 FIBERGLASS ENTRY DOORS
- 08 71 00 DOOR HARDWARE

DIVISION 09 – FINISHES

09 91 00 PAINTING

DIVISION 31 – EARTHWORK

- 31 10 00 SITE PREPARATION
- 31 22 00 EARTH MOVING
- 31 25 00 EROSION AND SEDIMENTATION CONTROL

DIVISION 32 – EXTERIOR IMPROVEMENTS

- 32 12 16 ASPHALT PAVING
- 32 17 23 PAVEMENT MARKINGS
- 32 30 00 SITE IMPROVEMENTS
- 32 93 00 PLANTING
- 33 40 00 STORM DRAINAGE SYSTEMS

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes selective demolition, removal, and salvage of building and site elements as indicated on drawings including but not limited to:
 - 1. Removal of existing fiber cement siding and trim,
 - 2. Removal of existing soffits,
 - 3. Removal of existing storage shed sliding doors, door frames, door hardware, and exterior trim
 - 4. Removal of existing storage shed roof,
 - 5. Removal of existing fascia and barge boards,
 - 6. Removal of existing asphalt and concrete pavement, sidewalk, curbs, and landscaping,
 - 7. Salvage of existing downspouts,
 - 8. Salvage fire extinguishers and cabinets for reinstallation,
 - 9. Salvage existing signage for reinstallation,
- B. Fill voids created as a result of removals or demolition.
- C. Protect existing building and site elements scheduled to remain during demolition activities and while new work is being installed.

1.2 RELATED SECTIONS

- A. Section 311000 Site Clearing
- B. Section 312000 Earth Moving

1.3 REGULATORY REQUIREMENTS

- A. Conform to applicable State and local codes for demolition of structures, safety of adjacent structures, dust control, and runoff control.
- B. Obtain required permits and licenses from appropriate authorities. Pay associated fees including disposal charges.
- C. Notify affected utility companies before starting work and comply with their requirements.
- D. Do not close or obstruct public or private roadways, sidewalks, or fire hydrants without appropriate permits or written authorization.
- E. Conform to applicable regulatory procedures when hazardous or contaminated materials are discovered.

1.4 REFERENCES

- A. 29 CFR 1926- U.S. Occupational Safety and Health Standards; current edition.
- B. NFPA 241- Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2009.

1.5 SUBMITTALS

- A. Schedule: Submit for approval selective demolition schedule, including schedule for any interruption of utility service to affected units. Schedule of demolition activities to be updated at each scheduled construction meeting.
 - 1. Indicate detailed sequence of demolition and removal work with starting and ending dates for each activity.
 - 2. Indicate any interruption of services.
 - 3. Indicate locations of temporary protection from the work and means of egress from the building.
- B. Site Plan showing:

- 1. Vegetation to be protected.
- 2. Restore landscaping at areas disturbed by construction.
- 3. Areas for temporary construction and field offices.
- 4. Areas for temporary and permanent placement of removed materials.
- C. Demolition Plan: Submit demolition plan as specified by OSHA and local authorities.
 - 1. Indicate extent of demolition, removal sequence, bracing and shoring, and location and construction of barricades and fences.
 - 2. Identify demolition firm and submit qualifications.
 - 3. Include a summary of safety procedures.
 - 4. Indicate protection and separation of occupied premises.
- D. Project Record Documents: Accurately record actual locations of capped and active utilities.

1.6 QUALITY ASSURANCE

A. Codes and Regulations: Comply with governing codes and regulations. Use experienced workers. Maintain watertight integrity as needed to protect construction to remain from structural and environmental damage.

1.7 PROJECT CONDITIONS

- A. Existing Conditions: Refer to construction drawing sets for information.
- B. Drawings showing existing construction and utilities are based on casual field observation and existing record documents only.
 - 1. Verify that construction and utility arrangements are as shown.
 - 2. Report discrepancies to Owner before disturbing existing installation.
 - 3. Beginning of demolition work constitutes acceptance of existing conditions.
- C. Owner assumes no responsibility for condition of structures or portion of structures to be demolished.
- D. Conditions existing at time of inspection for bidding purposes will be maintained by Owner as reasonably practical.
- E. Building will remain fully occupied during work of this project. Isolate work areas to limit dust, dirt, noise and debris from impacting occupied space. Contractor is responsible for site control and dust control in accordance with Section 01 50 00 Temporary Facilities and Controls.
- F. Protection of Existing Improvements: Provide, erect and maintain barricades, coverings, or other types of protection necessary to prevent damage to existing improvements. Restore any site improvements, including but not limited to landscaping, pavement, walks, structures, fences and planters, damaged by this work to their original condition, as acceptable to Owner and in accordance with Section 01 50 00 Temporary Facilities and Controls.
- G. Unless otherwise indicated in Contract Documents or specified by the Owner, items of salvageable value to Contractor shall be removed from site. Storage or sale of removed items on site will not be permitted and shall not interfere with other work specified.

PART 2 PRODUCTS

- 2.1 FILL MATERIALS
 - A. Fill material shall be aggregate fill materials as specified in Section 312000

PART 3 EXECUTION

- 3.1 GENERAL PROCEDURES AND PROJECT CONDITIONS
 - A. Refer to Section 017419 Construction Waste Management and Disposal for additional requirements.
 - B. Comply with governing regulations pertaining to environmental protection.
 - C. Comply with applicable requirements of NFPA 241.
 - D. Obtain required permits.
 - E. Do not begin removal until receipt of notification to proceed from Owner.
 - F. Protect existing structures and other elements that are not to be removed.
 - 1. Prevent movement of structure; provide shoring and bracing.
 - 2. Prevent movement or settlement of adjacent structures.
 - 3. Conduct demolition to minimize interference with adjacent structures or pavement to remain.
 - 4. Cease operations immediately if adjacent structures appear to be in danger. Notify authority having jurisdiction. Do not resume operations until directed by authority.
 - 5. Perform cutting to accomplish removals as specified in Section 01 73 29 Cutting and Patching.
 - 6. Do not damage building elements and improvements indicated to remain.
 - 7. Repair adjacent construction and finishes damaged during removal work to like new condition as specified in Section 01 73 29 Cutting and Patching.
 - G. Take precautions to prevent catastrophic or uncontrolled collapse of structures to be removed; do not allow worker or public access within range of potential collapse of unstable structures.
 - H. Occupied Spaces: The site and buildings will remain occupied during the work of this project. Do not close or obstruct streets, walks, drives or other occupied or used spaces or facilities without the written permission of the Owner and the authorities having jurisdiction. Do not interrupt utilities serving occupied or used facilities without the written permission of the Owner; Owner requires minimum seven (7) days' notice. Email notice to Owner's Project Manager is acceptable as official "written notice".
 - I. Provide, erect and maintain temporary barriers and security devices. Provide adequate protection against accidental trespassing. Use physical barriers to prevent access to areas that could be hazardous to workers or the public.
 - J. Secure project after work hours.
 - K. Do not close or obstruct roadways or sidewalks without permit.
 - L. Conduct operations to minimize obstruction of public and private entrances and exits; do not obstruct required exits at any time; protect persons using entrances and exits from removal operations.
 - M. Notify adjacent property owners of work that may affect their property, potential noise, utility outages, or other disruptions. Obtain written permission from adjacent property owners when demolition equipment will traverse, infringe upon, or limit access to their property. Coordinate notice with Owner.
 - N. Minimize production of dust due to demolition operations;
 - 1. Sprinkle work with water to minimize dust. Provide hoses and water connections for this purpose.
 - 2. Do not allow water use to result in ice, flooding, sedimentation of public waterways or storm sewers, or other pollution.
 - O. If hazardous materials are discovered during removal operations, stop work and notify the Owner; hazardous materials include regulated asbestos containing materials, lead, PCB's, and mercury.
 - P. Perform demolition in a manner that maximizes salvage and recycling of materials.

3.2 TEMPORARY PROTECTION

- A. Existing building envelope, including roof decking, shall remain watertight at all times throughout the construction process.
- B. Do not damage existing building elements or site improvements to remain. Protect existing materials, appurtenances, and structures, which are not to be demolished. Repair damage to existing items to remain caused by demolition operations.
- C. Items of salvage value, not included on schedule of salvage items to be returned to Owner, shall be removed from the site. Storage or sale of items at project site is prohibited.
- D. Provide temporary protective sheeting over uncovered deck surfaces.
- E. Do not permit traffic over unprotected or repaired deck surface.

3.3 EXISTING UTILITIES

- A. Coordinate work with utility companies; notify before starting work and comply with their requirements; obtain required permits.
- B. Protect existing utilities to remain from damage.
- C. Do not disrupt public utilities without permit from authority having jurisdiction.
- D. Do not close, shut off, or disrupt existing life safety systems that are in use without at least seven (7) days' prior written notification to Owner.
- E. Do not close, shut off, or disrupt existing utility branches or take-offs that are in use without at least seven (7) days' prior written notification to Owner.
- F. Locate and mark utilities to remain; mark using highly visible tags or flags, with identification of utility type; protect from damage due to subsequent construction, using substantial barricades if necessary.
- G. Mark location of utilities. Protect and maintain in safe and operable condition utilities that are to remain. Prevent interruption of existing utility service to occupied or used facilities, except when authorized in writing by authorities having jurisdiction. Provide temporary services during interruptions to existing utilities as acceptable to governing authorities and Owner.
- H. Remove exposed piping, valves, meters, equipment, supports and foundations of disconnected and abandoned utilities.

3.4 SELECTIVE DEMOLITION

- A. Isolate areas in which demolition is being conducted from other areas that are still occupied.
 - 1. Provide, erect, and maintain temporary dustproof partitions in locations of work.
- B. Remove existing work as indicated and as required to accomplish new work.
 - 1. Remove items indicated on drawings.
 - 2. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified.
- C. Salvage items indicated for salvage, relocation or recycling.
- D. Maintain weatherproof exterior building enclosure except for interruptions required for replacement or modifications; take care to prevent water and humidity damage.
- E. Fill excavations, open pits and holes in ground areas generated as result of removals, using specified fill; compact fill as required so that required rough grade elevations do not subside within one (1) year after completion.

F. Restore landscaping to 'like-new' condition at areas disturbed by construction.

3.5 DEBRIS AND WASTE REMOVAL

- A. Remove from site debris, rubbish, and other materials resulting from demolition operations. Do not allow demolished materials to accumulate on site.
- B. Remove from site all materials not to be reused on site.
- C. Leave site in clean condition, ready for subsequent work.
- D. Clean adjacent structures and improvements of dust, dirt, and debris caused by demolition operations. Return adjacent areas to condition existing prior to start of work.
- E. Clean up spillage and wind-blown debris from public and private lands.
- F. Transport materials removed from demolished structures with appropriate vehicles and dispose offsite to areas that are approved for disposal by governing authorities and appropriate property owners.

END OF SECTION

PART 1 GENERAL

1.1 SUMMARY

A. Section includes cast-in-place concrete, including formwork, reinforcement, concrete materials, mixture design, placement procedures, and finishes.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM C31 Practice for Making and Curing Concrete Test Specimens in the Field.
 - 2. ASTM C33 -Specification for Concrete Aggregates.
 - 3. ASTM C39 Test Method for Compressive Strength of Cylindrical Concrete Specimens.
 - 4. ASTM C94 -Specification for Ready-Mixed Concrete.
 - 5. ASTM C143 -Test Method for Slump of Portland Cement Concrete
 - 6. ASTM C150 -Specification for Portland Cement.
 - 7. ASTM C171 -Standard Specifications for Sheet Materials for Curing Concrete.
 - 8. ASTM C172 -Standard Practice for Sampling Fresh Concrete

1.3 DEFINITIONS

- A. Cementitious Materials: Portland cement alone or in combination with one or more of the following: blended hydraulic cement, fly ash, slag cement, other pozzolans, and silica fume; materials subject to compliance with requirements.
- B. W/C Ratio: The ratio by weight of water to cementitious materials.

1.4 PREINSTALLATION MEETINGS

- A. Preinstallation Conference: Conduct conference at project site.
 - 1. Before submitting design mixtures, review concrete design mixture and examine procedures for ensuring quality of concrete materials. Require representatives of each entity directly concerned with cast-in-place concrete to attend, including the following:
 - a. Contractor's superintendent.
 - b. Concrete Subcontractor.
 - c. Retain first subparagraph below if special concrete finishes are included in Project.
 - d. Special concrete finish Subcontractor.
 - 2. Review special inspection and testing and inspecting agency procedures for field quality control, concrete finishes and finishing, curing procedures, vapor-retarder installation, steelreinforcement installation, floor and slab flatness and levelness measurement, concrete repair procedures, and concrete protection.

1.5 ACTION SUBMITTALS

- A. Product Data: For each type of product.
- B. Design Mixtures: For each concrete mixture. Submit alternate design mixtures when characteristics of materials, Project conditions, weather, test results, or other circumstances warrant adjustments.
 - 1. Indicate amounts of mixing water to be withheld for later addition at Project site.
- C. Steel Reinforcement Shop Drawings: Placing Drawings that detail fabrication, bending, and placement. Include bar sizes, lengths, material, grade, bar schedules, stirrup spacing, bent bar diagrams, bar arrangement, splices and laps, mechanical connections, tie spacing, hoop spacing, and supports for concrete reinforcement.

D. Construction Joint Layout: Indicate proposed construction joints required to construct the structure.

1.6 ACTION SUBMITTALS

- A. Qualification Data: For Installer.
- B. Material Certificates: For each of the following, signed by manufacturers:
 - 1. Cementitious materials.
 - 2. Admixtures.
 - 3. Form materials and form-release agents.
 - 4. Steel reinforcement and accessories.
 - 5. Fiber reinforcement.
 - 6. Waterstops.
 - 7. Curing compounds.
 - 8. Floor and slab treatments.
 - 9. Bonding agents.
 - 10. Adhesives.
 - 11. Vapor retarders.
 - 12. Semirigid joint filler.
 - 13. Joint-fillerstrips.
 - 14. Repair materials.
- C. Floor surface flatness and levelness measurements indicating compliance with specified tolerances.

1.7 QUALITY ASSURANCE

- A. Installer Qualifications: A qualified installer who employs on Project personnel qualified as ACIcertified Flatwork Technician and Finisher and a supervisor who is an ACI-certified Concrete Flatwork Technician.
- B. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment.

1.8 FIELD CONDITIONS

- A. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
 - 1. When average high and low temperature is expected to fall below 40 deg F (4.4 deg C) for three successive days, maintain delivered concrete mixture temperature within the temperature range required by ACI 301 (ACI 301M).
 - 2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
 - 3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators unless otherwise specified and approved in mixture designs.
- B. Hot-Weather Placement: Comply with ACI 301 (ACI 301M) and as follows:
 - 1. Maintain concrete temperature below 90 deg F (32 deg C) at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
 - 2. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade uniformly moist without standing water, soft spots, or dry areas.

PART 2 PRODUCTS

- 2.1 CONCRETE, GENERAL
 - A. ACI Publications: Comply with the following unless modified by requirements in the Contract Documents:
 - 1. ACI 301 (ACI 301M).
 - 2. ACI 117 (ACI 117M).

2.2 FORM-FACING MATERIALS

- A. Smooth-Formed Finished Concrete: Form-facing panels that provide continuous, true, and smooth concrete surfaces. Furnish in largest practicable sizes to minimize number of joints.
 - 1. Plywood, metal, or other approved panel materials.
- B. Rough-Formed Finished Concrete: Plywood, lumber, metal, or another approved material. Provide lumber dressed on at least two edges and one side for tight fit.
- C. Form-Release Agent: Commercially formulated form-release agent that does not bond with, stain, or adversely affect concrete surfaces and does not impair subsequent treatments of concrete surfaces.
 - 1. Formulate form-release agent with rust inhibitor for steel form-facing materials.
- D. Form Ties: Factory-fabricated, removable or snap-off glass-fiber-reinforced plastic or metal form ties designed to resist lateral pressure of fresh concrete on forms and to prevent spalling of concrete on removal.
 - 1. Furnish units that leave no corrodible metal closer than 1 inch (25 mm) to the plane of exposed concrete surface.

2.3 STEEL REINFORCEMENT

A. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.

2.4 REINFORCEMENT ACCESSORIES

- A. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), plain-steel bars, cut true to length with ends square and free of burrs.
- B. Epoxy-Coated Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), plain-steel bars, ASTM A 775/A 775M epoxy coated.
- C. Epoxy Repair Coating: Liquid, two-part, epoxy repair coating; compatible with epoxy coating on reinforcement and complying with ASTM A 775/A 775M.
- D. Zinc Repair Material: ASTM A 780/A 780M.
- E. Bar Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening reinforcing bars and welded-wire reinforcement in place. Manufacture bar supports from steel wire, plastic, or precast concrete according to CRSI's "Manual of Standard Practice," of greater compressive strength than concrete.

2.5 CONCRETE MATERIALS

- A. Source Limitations: Obtain each type or class of cementitious material of the same brand from the same manufacturer's plant, obtain aggregate from single source, and obtain admixtures from single source from single manufacturer.
- B. Cementitious Materials:
 - 1. Retain type and color of portland cement from options in "Portland Cement" Subparagraph below.

- 2. Portland Cement: ASTM C 150/C 150M, [Type I] [Type II] [Type I/II] [Type V], gray.
- 3. Silica fume in "Silica Fume" Subparagraph below is most often used in high-strength concrete and in special applications, such as bridge decks, to enhance durability by lowering permeability of concrete. ACI 301 (ACI 301M) identifies silica fume as a cementitious material.
- 4. Silica Fume: ASTM C 1240, amorphous silica.
- C. Normal-Weight Aggregates: ASTM C 33/C 33M, [Class 3S] [Class 3M] [Class 1N] coarse aggregate or better, graded. Provide aggregates from a single source.
 - 1. Maximum Coarse-Aggregate Size: 3/4 inch nominal.
- D. Air-Entraining Admixture: ASTM C 260/C 260M.
- E. Water: ASTM C 94/C 94M and potable.

2.6 VAPOR RETARDERS

A. Sheet Vapor Retarder: Polyethylene sheet, ASTM D 4397, not less than 10 mils thick.

2.7 FLOOR AND SLAB TREATMENTS

A. Slip-Resistive Emery Aggregate Finish: Factory-graded, packaged, rustproof, nonglazing, abrasive, crushed emery aggregate containing not less than 50 percent aluminum oxide and not less than 20 percent ferric oxide; unaffected by freezing, moisture, and cleaning materials with 100 percent passing No. 4 sieve.

2.8 CURING MATERIALS

- A. Evaporation retarders temporarily reduce moisture loss from concrete surfaces awaiting finishing in hot, dry, and windy conditions. Evaporation retarders are not curing compounds.
- B. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
- C. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. when dry.
- D. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
- E. Water: Potable.

2.9 RELATED MATERIALS

- A. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber.
- B. Epoxy Bonding Adhesive: ASTM C 881, two-component epoxy resin, capable of humid curing and bonding to damp surfaces, of class suitable for application temperature and of grade to suit requirements, and as follows:
 - 1. Types I and II, nonload bearing for bonding hardened or freshly mixed concrete to hardened concrete.

2.10 CONCRETE MIXTURES, GENERAL

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301 (ACI 301M).
 - 1. Use a qualified independent testing agency for preparing and reporting proposed mixture designs based on laboratory trial mixtures.
- B. Cementitious Materials: Limit percentage, by weight, of cementitious materials (fly ash or slag) other than Portland cement in concrete to 25 percent maximum.
- C. Limit water-soluable, chloride-ion content in hardened concrete 0.15 percent by weight of cement.

- D. Admixtures: Use admixtures according to the manufacturer's written instructions.
 - 1. Use water-reducing or plasticizing admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing or retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 - 3. Use water-reducing admixture in concrete with a water-cementitious ratio below that shown in section 2.11.

2.11 CONCRETE MIXTURES FOR BUILDING ELEMENTS

- A. Slabs-on-Grade: Normal-weight concrete.
 - 1. Minimum Compressive Strength: 2500 As indicated at 28 days.
 - 2. Maximum W/C Ratio: 0.45
 - 3. Minimum Cementitious Materials Content: 470 lb/cu. yd..
 - 4. Slump Limit: 4 inches plus or minus 1 inch.
 - 5. Air Content: Not less than 5 percent or more than 7%

2.12 FABRICATING REINFORCEMENT

A. Fabricate steel reinforcement according to CRSI's "Manual of Standard Practice."

2.13 CONCRETE MIXING

- A. Ready-Mixed Concrete: Measure, batch, mix, and deliver concrete according to ASTM C 94/C 94M and ASTM C 1116/C 1116M, and furnish batch ticket information.
 - 1. When air temperature is between 85 and 90 deg F (30 and 32 deg C), reduce mixing and delivery time from 1-1/2 hours to 75 minutes; when air temperature is above 90 deg F (32 deg C), reduce mixing and delivery time to 60 minutes.
- B. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. Mix concrete materials in appropriate drum-type batch machine mixer.
 - 1. For mixer capacity of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released.
 - 2. For mixer capacity larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd.
 - 3. Provide batch ticket for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixture time, quantity, and amount of water added. Record approximate location of final deposit in structure.

PART 3 EXECUTION

3.1 FORMWORK INSTALLATION

- A. Design, erect, shore, brace, and maintain formwork, according to ACI 301 (ACI 301M), to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until structure can support such loads.
- B. Construct formwork so concrete members and structures are of size, shape, alignment, elevation, and position indicated, within tolerance limits of ACI 117 (ACI 117M).
- C. Limit concrete surface irregularities, designated by ACI 347 as abrupt or gradual, as follows:
 - 1. Class A, 1/8 inch for smooth-formed finished surfaces.
 - 2. Class B, 1/4 inch for rough-formed finished surfaces.
- D. Construct forms tight enough to prevent loss of concrete mortar.

- E. Construct forms for easy removal without hammering or prying against concrete surfaces. Provide crush or wrecking plates where stripping may damage cast-concrete surfaces. Provide top forms for inclined surfaces steeper than 1.5 horizontal to 1 vertical.
 - 1. Install keyways, reglets, recesses, and the like, for easy removal.
 - 2. Do not use rust-stained steel form-facing material.
- F. Set edge forms, bulkheads, and intermediate screed strips for slabs to achieve required elevations and slopes in finished concrete surfaces. Provide and secure units to support screed strips; use strike-off templates or compacting-type screeds.
- G. Provide temporary openings for cleanouts and inspection ports where interior area of formwork is inaccessible. Close openings with panels tightly fitted to forms and securely braced to prevent loss of concrete mortar. Locate temporary openings in forms at inconspicuous locations.
- H. Chamfer exterior corners and edges of permanently exposed concrete.
- I. Clean forms and adjacent surfaces to receive concrete. Remove chips, wood, sawdust, dirt, and other debris just before placing concrete.
- J. Retighten forms and bracing before placing concrete, as required, to prevent mortar leaks and maintain proper alignment.
- K. Coat contact surfaces of forms with form-release agent, according to manufacturer's written instructions, before placing reinforcement.

3.2 EMBEDDED ITEM INSTALLATION

- A. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use setting drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
 - 1. Install anchor rods, accurately located, to elevations required and complying with tolerances in Section 7.5 of AISC 303.

3.3 REMOVING AND REUSING FORMS

- A. General: Formwork for sides of beams, walls, columns, and similar parts of the Work that does not support weight of concrete may be removed after cumulatively curing at not less than 50 deg F for 24 hours after placing concrete. Concrete has to be hard enough to not be damaged by form-removal operations, and curing and protection operations need to be maintained.
 - 1. Leave formwork for beam soffits, joists, slabs, and other structural elements that support weight of concrete in place until concrete has achieved its 28-day design compressivestrength.
- B. Clean and repair surfaces of forms to be reused in the Work. Split, frayed, delaminated, or otherwise damaged form-facing material are not acceptable for exposed surfaces. Apply new form-release agent.
- C. When forms are reused, clean surfaces, remove fins and laitance, and tighten to close joints. Align and secure joints to avoid offsets. Do not use patched forms for exposed concrete surfaces unless approved by Owner.

3.4 VAPOR-RETARDER INSTALLATION

- A. Sheet Vapor Retarders: Place, protect, and repair sheet vapor retarder according to ASTM E 1643 and manufacturer's written instructions.
 - 1. Lap joints 6 inches and seal with manufacturer's recommended tape.

3.5 STEEL REINFORCEMENT INSTALLATION

A. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

- 1. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.
- B. Clean reinforcement of loose rust and mill scale, earth, ice, and other foreign materials that reduce bond to concrete.
- C. Accurately position, support, and secure reinforcement against displacement. Locate and support reinforcement with bar supports to maintain minimum concrete cover. Do not tack weld crossing reinforcing bars.
- D. Set wire ties with ends directed into concrete, not toward exposed concrete surfaces.
- E. Install welded-wire reinforcement in longest practicable lengths on bar supports spaced to minimize sagging. Lap edges and ends of adjoining sheets at least one mesh spacing. Offset laps of adjoining sheet widths to prevent continuous laps in either direction. Lace overlaps with wire.

3.6 JOINTS

- A. Coordinate joint types, description, and location with Drawings. Joint types are consolidated in this article for consistency rather than for strict sequence of installation.
- B. General: Construct joints true to line with faces perpendicular to surface plane of concrete.
- C. Construction Joints: Install so strength and appearance of concrete are not impaired, at locations indicated or as approved by Owner.
 - 1. Place joints perpendicular to main reinforcement. Continue reinforcement across construction joints unless otherwise indicated. Do not continue reinforcement through sides of strip placements of floors and slabs.
 - 2. Form keyed joints as indicated. Embed keys at least 1-1/2 inches into concrete.
 - 3. Locate joints for slabs in the middle third of spans. Offset joints in girders a minimum distance of twice the beam width from a beam-girder intersection.
 - 4. Space vertical joints in walls as indicated.
- D. Contraction Joints in Slabs-on-Grade: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. Construct contraction joints for a depth equal to at least one-fourth of concrete thickness as follows:
 - 1. Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint to a radius of 1/8 inch. Repeat grooving of contraction joints after applying surface finishes. Eliminate groover tool marks on concrete surfaces.
 - 2. Sawed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-rimmed blades. Cut 1/8-inch wide joints into concrete when cutting action does not tear, abrade, or otherwise damage surface and before concrete develops random contraction cracks.
- E. Isolation Joints in Slabs-on-Grade: After removing formwork, install joint-filler strips at slab junctions with vertical surfaces, such as column pedestals, foundation walls, grade beams, and other locations, as indicated.
 - 1. Extend joint-filler strips full width and depth of joint, terminating flush with finished concrete surface unless otherwise indicated.
 - 2. Terminate full-width joint-filler strips not less than 1/2 inch or more than 1 inch below finished concrete surface where joint sealants, specified in Section 079200 "Joint Sealants," are indicated.
 - 3. Install joint-filler strips in lengths as long as practicable. Where more than one length is required, lace or clip sections together.

3.7 CONCRETE PLACEMENT

A. Before placing concrete, verify that installation of formwork, reinforcement, and embedded items is complete and that required inspections are completed.

- B. Do not add water to concrete during delivery, at Project site, or during placement unless approved by Owner.
- C. Deposit concrete continuously in one layer or in horizontal layers of such thickness that no new concrete is placed on concrete that has hardened enough to cause seams or planes of weakness. If a section cannot be placed continuously, provide construction joints as indicated. Deposit concrete to avoid segregation.
 - 1. Deposit concrete in horizontal layers of depth not to exceed formwork design pressures and in a manner to avoid inclined construction joints.
 - 2. Consolidate placed concrete with mechanical vibrating equipment according to ACI 301 (ACI 301M).
 - 3. Do not use vibrators to transport concrete inside forms. Insert and withdraw vibrators vertically at uniformly spaced locations to rapidly penetrate placed layer and at least 6 inches into preceding layer. Do not insert vibrators into lower layers of concrete that have begun to lose plasticity. At each insertion, limit duration of vibration to time necessary to consolidate concrete and complete embedment of reinforcement and other embedded items without causing mixture constituents to segregate.
- D. Deposit and consolidate concrete for floors and slabs in a continuous operation, within limits of construction joints, until placement of a panel or section is complete.
 - 1. Consolidate concrete during placement operations, so concrete is thoroughly worked around reinforcement and other embedded items and into corners.
 - 2. Maintain reinforcement in position on chairs during concrete placement.
 - 3. Screed slab surfaces with a straightedge and strike off to correct elevations.
 - 4. Slope surfaces uniformly to drains where required.
 - 5. Begin initial floating using bull floats or darbies to form a uniform and open-textured surface plane, before excess bleedwater appears on the surface. Do not further disturb slab surfaces before starting finishing operations.

3.8 FINISHING FORMED SURFACES

- A. Rough-Formed Finish: As-cast concrete texture imparted by form-facing material with tie holes and defects repaired and patched. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
 - 1. Apply to concrete surfaces not exposed to public view.
- B. Smooth-Formed Finish: As-cast concrete texture imparted by form-facing material, arranged in an orderly and symmetrical manner with a minimum of seams. Repair and patch tie holes and defects. Remove fins and other projections that exceed specified limits on formed-surface irregularities.
 - 1. Apply to concrete surfaces exposed to public view.
- C. Related Unformed Surfaces: At tops of walls, horizontal offsets, and similar unformed surfaces adjacent to formed surfaces, strike off smooth and finish with a texture matching adjacent formed surfaces. Continue final surface treatment of formed surfaces uniformly across adjacent unformed surfaces unless otherwise indicated.

3.9 FINISHING FLOORS AND SLABS

- A. General: Comply with ACI 302.1R recommendations for screeding, restraightening, and finishing operations for concrete surfaces. Do not wet concrete surfaces.
- B. Float Finish: Consolidate surface with power-driven floats or by hand floating if area is small or inaccessible to power-driven floats. Restraighten, cut down high spots, and fill low spots. Repeat float passes and restraightening until surface is left with a uniform, smooth, granular texture.
 - 1. Apply float finish to surfaces indicated.

- C. Broom Finish: Apply a broom finish to exterior concrete platforms, steps, ramps, and elsewhere as indicated.
 - 1. Immediately after float finishing, slightly roughen trafficked surface by brooming with fiberbristle broom perpendicular to main traffic route. Coordinate required final finish with Owner before application.
- D. Slip-Resistive Finish: Before final floating, apply slip-resistive aggregate finish where indicated and to concrete stair treads, platforms, and ramps. Apply according to manufacturer's written instructions and as follows:
 - 1. Uniformly spread 25 lb/100 sq. ft. of dampened slip-resistive aggregate over surface in one or two applications. Tamp aggregate flush with surface, but do not force below surface.
 - 2. After broadcasting and tamping, apply float finish.
 - 3. After curing, lightly work surface with a steel wire brush or an abrasive stone and water to expose slip-resistive aggregate.

3.10 CONCRETE PROTECTING AND CURING

- A. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and ACI 301 (ACI 301M) for hotweather protection during curing.
- B. Evaporation Retarder: Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.
- C. Formed Surfaces: Cure formed concrete surfaces, including underside of beams, supported slabs, and other similar surfaces. If forms remain during curing period, moist cure after loosening forms. If removing forms before end of curing period, continue curing for remainder of curing period.
- D. Unformed Surfaces: Begin curing immediately after finishing concrete. Cure unformed surfaces, including floors and slabs, concrete floor toppings, and other surfaces.
- E. Cure concrete according to ACI 308.1, by one or a combination of the following methods:
 - 1. Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials:
 - a. Retain first three subparagraphs below as Contractor's options unless unsuited for Project.
 - b. Water.
 - c. Continuous water-fog spray.
 - d. Absorptive cover, water saturated, and kept continuously wet. Cover concrete surfaces and edges with 12-inch lap over adjacent absorptive covers.
 - 2. Curing and Sealing Compound: Apply uniformly to floors and slabs indicated in a continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Repeat process 24 hours later and apply a second coat. Maintain continuity of coating and repair damage during curing period.

3.11 CONCRETE SURFACE REPAIRS

- A. Defective Concrete: Repair and patch defective areas when approved by Owner. Remove and replace concrete that cannot be repaired and patched to Owner's approval.
- B. Patching Mortar: Mix dry-pack patching mortar, consisting of 1 part portland cement to 2-1/2 parts fine aggregate passing a No. 16 sieve, using only enough water for handling and placing.

- C. Repairing Formed Surfaces: Surface defects include color and texture irregularities, cracks, spalls, air bubbles, honeycombs, rock pockets, fins and other projections on the surface, and stains and other discolorations that cannot be removed by cleaning.
 - 1. Immediately after form removal, cut out honeycombs, rock pockets, and voids more than 1/2 inch in any dimension to solid concrete. Limit cut depth to 3/4 inch. Make edges of cuts perpendicular to concrete surface. Clean, dampen with water, and brush-coat holes and voids with bonding agent. Fill and compact with patching mortar before bonding agent has dried. Fill form-tie voids with patching mortar or cone plugs secured in place with bonding agent.
 - 2. Repair defects on surfaces exposed to view by blending white portland cement and standard portland cement so that, when dry, patching mortar matches surrounding color. Patch a test area at inconspicuous locations to verify mixture and color match before proceeding with patching. Compact mortar in place and strike off slightly higher than surrounding surface.
 - 3. Repair defects on concealed formed surfaces that affect concrete's durabilityand structural performance as determined by Owner.
- D. Repairing Unformed Surfaces: Test unformed surfaces, such as floors and slabs, for finish and verify surface tolerances specified for each surface. Correct low and high areas. Test surfaces sloped to drain for trueness of slope and smoothness; use a sloped template.
 - 1. Repair finished surfaces containing defects. Surface defects include spalls, popouts, honeycombs, rock pockets, crazing and cracks in excess of 0.01 inch wide or that penetrate to reinforcement or completely through unreinforced sections regardless of width, and other objectionable conditions.
 - 2. After concrete has cured at least 14 days, correct high areas by grinding.
 - 3. Correct localized low areas during or immediately after completing surface finishing operations by cutting out low areas and replacing with patching mortar. Finish repaired areas to blend into adjacent concrete.
 - 4. Correct other lowareas scheduled to receive floor coverings with a repair underlayment. Prepare, mix, and apply repair underlayment and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface. Feather edges to match adjacent floor elevations.
 - 5. Correct other low areas scheduled to remain exposed with a repair topping. Cut out low areas to ensure a minimum repair topping depth of 1/4 inch to match adjacent floor elevations. Prepare, mix, and apply repair topping and primer according to manufacturer's written instructions to produce a smooth, uniform, plane, and level surface.
 - 6. Repair defective areas, except random cracks and single holes 1 inch or less in diameter, by cutting out and replacing with fresh concrete. Remove defective areas with clean, square cuts and expose steel reinforcement with at least a 3/4-inch clearance all around. Dampen concrete surfaces in contact with patching concrete and apply bonding agent. Mix patching concrete of same materials and mixture as original concrete, except without coarse aggregate. Place, compact, and finish to blend with adjacent finished concrete. Cure in same manner as adjacent concrete.
 - 7. Repair random cracks and single holes 1 inch or less in diameter with patching mortar. Groove top of cracks and cut out holes to sound concrete and clean off dust, dirt, and loose particles. Dampen cleaned concrete surfaces and apply bonding agent. Place patching mortar before bonding agent has dried. Compact patching mortar and finish to match adjacent concrete. Keep patched area continuously moist for at least 72 hours.
- E. Perform structural repairs of concrete, subject to Owner's approval, using epoxy adhesive and patching mortar.
- F. Repair materials and installation not specified above may be used, subject to Owner's approval.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes:

1. Shop-applied coatings including but not limited to metal guardrails, metal handrails, and other metal fabrications.

1.2 REFERENCES

A. ASTM International:

- 1. ASTM B 117 Practice for Operating Salt Spray (Fog) Apparatus.
- 2. ASTM D 1654 Standard Test Method for Evaluation of Painted or Coated Specimens Subjected to Corrosive Environments.
- 3. ASTM D 2244 Test Method for Calculation of Color Differences from Instrumentally Measured Color Coordinates.
- 4. ASTM D 2247 Standard Practice for Testing Water Resistance of Coatings in 100% Relative Humidity.
- 5. ASTM D 3363 Standard Test Method for Film Hardness by Pencil Test.
- 6. ASTM D 4214 Test Methods for Evaluating Degree of Chalking of Exterior Paint Films.

1.3 SUBMITTALS

A. Product Data: Provide in the same order as scheduled by this Section:

- 1. Manufacturer's Product Data Sheets for each product.
 - a. Performance features, substrate recommendations, primer recommendations (where required), and product limitations.
 - b. Recommended dry film thickness.
 - c. Solids by weight.
 - d. Solids by volume.
- 2. Product/Label Analysis for paint products:
 - a. Pigment and vehicle percentages by weight.
 - b. Pigment composition analysis, including fillers in percent by weight.
 - c. Vehicle Composition analysis, including resins, solvents, and additives by weight.
- 3. Material Data Safety Sheets (MSDS) :
 - a. Solvents, driers, additives, and fillers.
 - b. Volatile organic compounds (VOC) emissions in grams per liter.
- 4. Finish Coat System Product Testing Results:
 - a. Abrasion resistance.
 - b. Color retention.
 - c. Gloss retention.
 - d. Salt Fog Spray Test.
- B. Samples for Verification: For each coating product, for each color, gloss, and texture specified, on specified substrate.
- C. Product test reports.
- D. Qualifications: For shop-applied coatings Applicator.
- E. Maintenance data.
- F. Warranty: Sample of special warranty.

1.4 QUALITY ASSURANCE

- A. Manufacturer: Employ locally available technical field representative, testing equipment, and services as necessary to perform inspections, observations, and to determine compliance with manufacturer's instructions and provisions of Contract Documents.
- B. Applicator Qualifications:
 - 1. Company with employees specializing in work of this Section.
 - 2. Able to list minimum 3 projects within last 3 years documented experience showing satisfactory performance for projects of equivalent size and scope.
 - 3. Employ qualified journeymen painters, apprentices under direction of qualified journeymen, in accordance with trade regulations.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Deliver, unload, and store shop-coated items so that they remain free of damage or deformation. Package and protect items during shipping and handling. Protect stored items from water; stack to facilitate drainage. Keep shop-coated items out of contact with materials that may adversely affect the coating.
- B. Protect shop-coated items with protective covering until installed.

1.6 WARRANTY

- A. Coating Warranty: Coating Applicator's warranty in which Applicator agrees to repair finish or replace coated items that demonstrate deterioration of shop-applied finishes within warranty period indicated.
 - 1. Exposed Coating: Deterioration includes but is not limited to:
 - a. Color fading in excess of 5 Delta E Hunter units per ASTM D 2244.
 - b. Peeling, checking, or cracking of coating adhesion to metal.
 - c. Chalking in excess of a No. 8 per ASTM D 4214, when tested per Method D 659.
 - d. Corrosion of substrate in excess of a No. 6 on cut edges and a No. 8 on field surfaces, when measured per ASTM D 1654.
 - 2. Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Basis-of-Design Product: Provide shop-applied coatings manufactured by PPG Industries, Inc., Pittsburgh, PA, (888) 774-4332, Email: <u>ideascapes@ppg.com</u>; Website: <u>www.ppgideascapes.com</u>
 - 1. PPG Ultradurable formulation.
 - 2. PPG Ultradurable clear coat.
- B. Substitution Requests: Conform to provisions of Section 012500 for products specified by this Section.

2.2 REGULATORY REQUIREMENTS

A. Shop Applied Coatings: Conform to State of Washington and US Environmental Protection Agency for maximum volatile organic compound (VOC) emissions.

2.3 SHOP GALVANIZED FINISHES

- A. Where galvanized finishes are specified, conform to the following:
 - 1. Galvanized Structural Steel Members: Hot-dip zinc-coat galvanize after fabrication, ASTM A123. Zinc coat galvanize exterior steel, including steel embeds, steel in contact with masonry

and concrete, weldments, connectors, and other miscellaneous steel framing exposed to weather, except as otherwise indicated.

- a. Up to 3/16 Inch Thick Steel: 2.0 oz average and 1.8 oz minimum.
- b. 1/4 Inch and Thicker Steel: 2.3 oz average and 2.0 oz minimum.
- 2. Galvanized Sheet Steel: As specified by applicable Sections. Where galvanized sheet steel is shown on Drawings but not otherwise specified, conform to ASTM A653 G90 at exterior exposed steel, G60 for exterior steel protected from weather, and G40 for interior steel.
- 3. Bolts and Threaded Fasteners: Hot-dip galvanize, ASTM A153, Class C or D.
- 4. Touch-up for damaged galvanized surfaces to remain unfinished: 95 percent zinc cold galvanizing compound.
 - a. ZRC Worldwide, Galvilite. http://www.zrcworldwide.com
 - b. ITW Devcon, Devcon Z. http://www.devcon.com
 - c. ITW LPS Cold Galvanize Corrosion Inhibitor.

2.4 SHOP-APPLIED COATINGS SCHEDULE

- A. Powder-Coat Finish for Steel Items fabricated from Shapes and Plates: fluoropolymer finish: AAMA 2605. Basis of design: PPG Industries, Inc., Ultradurable Powder Coating
 - 1. Coated Items: Metal guardrails, metal handrails.
 - 2. Color: Black
 - 3. Gloss: Medium
 - 4. Surface: Fine Texture

2.5 SOURCE QUALITY CONTROL

A. Shop Prepared steel to receive finish coatings under Work of Other Sections: Free of drips and other imperfections causing telegraphing through finished coating.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify conditions ready to receive work of this Section.

3.2 PREPARATION

A. Prepare surfaces as recommended by manufacturer, as specified by this section and Section 055000.

3.3 APPLICATION

- A. Apply in accordance with manufacturer's instructions and provisions of Contract Documents.
- B. Touch up damaged surfaces prior to special coating application as specified by this Section and Section 055000.
- C. Apply number of coats to achieve specified dry film thickness (DFT) and as instructed by manufacturer.
- D. Apply under-coatings in 3/4 tone color difference from final coat.
- E. Apply additional coats as required for full coverage with no holidays, color variations, or other surface imperfections.

3.4 PATCHING

A. At completion of work, repair surfaces damaged by other trades and requiring touch-up or refinishing by recoating entire surface, as necessary for uniform appearance.

3.5 FIELD QUALITY CONTROL

- A. Environmental Conditions: During coating application, make hourly record, maintain record in job shack, and submit upon request by Owner.
- B. Film Thickness Tests:
 - 1. Verify mil thickness with wet film gauge, in selected locations.
 - 2. Test surfaces with Tooke or approved dry film gauge, for total dry film thicknesses.

3.6 CLEANING

- A. As Work proceeds, promptly remove spilled, splashed, or splattered products so as not to damage surfaces. Keep premises free from unnecessary accumulation of tools, equipment, surplus materials, and debris.
- B. At conclusion of Project, thoroughly clean paint and splatters from surfaces including adjacent surfaces.
 - 1. Take care not to scratch or otherwise damage surfaces.
 - 2. Verify chemical compatibility of cleaners to be applied to materials to be cleaned.
- C. Leave premises neat and clean; free from debris and residue from work of this Section.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

- 1. Miscellaneous metal fabrications including but not limited to the following:
 - a. Steel plates, and supports,
 - b. Metal railings,
 - c. Fasteners, mounting clips, connectors, washers, and accessories as required,
 - d. Preparation, priming, and galvanizing of shop coated ferrous metal fabrications.

1.2 RELATED SECTIONS:

A. Section 055200 - Metal Railings

1.3 REFERENCES

- A. Reference Standards: Applicable provisions of the most recent adopted editions of the following standards shall apply to the work of this Section:
- B. AISC
 - 1. Manual of Steel Construction
 - 2. Code of Standard Practice for Steel Buildings and Bridges
 - 3. Load and Resistance Factor Design (LFRD) Specification for Structural Steel Buildings
 - 4. Seismic Provisions for Structural Steel Buildings
 - 5. Specification for Allowable Stress Design of Single-Angle Members, and for Load and Resistance Factor Design of Single Angle Members
- C. ASTM International: Standards indicated herein
- D. Architectural Metal Products Division of National Association of Architectural Metal Manufacturers (NAAMM): Metal Finishes Manual for Architectural and Metal Products.
- E. NAAMM-AMP 555: Code of Standard Practice for Architectural Metal Industry
- F. The Society for Protective Coatings (SSPC): Volume 1, Good Painting Practice, and Volume 2, Systems and Specifications.
- G. Research Council on Structural Connections (RCSC): Specifications for Structural Joints Using ASTM A325 and ASTM A490 Bolts.

1.4 ADMINISTRATIVE REQUIREMENTS

A. Coordination: Conform to Section 013113 for coordination with work of other Sections.

- 1. Coordinate requirements for primed and unprimed steel conforming to provisions of this Section and provisions required by applicable treatments and coating systems.
- 2. Other metal fabrications indicated.

1.5 SUBMITTALS

- A. Product Data: Include manufacturer's publications, specifications, instructions, performance criteria, and limitations. Show conformance with specifications.
- B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
 - 1. Prepare placing plan locating structural connectors.
 - 2. Include embedded items, including anchor bolts.
 - 3. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate weld length.

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 - 1. Prepare placing plan locating structural connectors.
 - 2. Include embedded items, including anchor bolts.
 - 3. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate weld length.

C. Certification: Submit certification letter attesting that specified shop finish preparation, procedures, and products, including galvanized plating and SSPC procedures have been followed.

D. Samples:

- 1. Provide Mockup in accordance with Section 014339
 - a. Owner accepted mock-up may be incorporated into work.

1.6 QUALITY ASSURANCE

- A. Fabricator Qualifications: Company specializing in work of this Section with minimum 5 years documented experience.
- B. Welders Qualifications: AWS qualified, WABO Certified within last 12 months.
- C. Welding: Perform in accordance with regulatory agencies.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Comply with Section 01 66 00, Product Storage and Handling Requirements, and following:

1. Protect from moisture and corrosion until erected.

PART 2 - PRODUCTS

2.1 MATERIALS

A. General:

- 1. Provide rolled shapes, bars, plates, sheets, strips, accessories, and the like, as detailed or required for complete installations.
- 2. Sizes, dimensions, and configurations as indicated on Drawings or as required.
- B. Steel:
 - 1. Steel Plate, Shapes, and Bars: ASTM A36
 - 2. Tubular Steel and Pipe: Cold formed hollow structural steel (HSS), ASTM A500 Grade B or hot formed ASTM A501, electric resistance welded (ERW), seamless.
 - 3. Steel Pipe: ASTM A53, Type S, Grade B, standard weight, Schedule 40 seamless.
 - 4. Stainless Steel Bolts, and Screws: ASTM F593
 - 5. Welding Electrodes: Conform to AWS Standards.
 - 6. Miscellaneous Metal: Provide rolled shapes, bars, sheets, strips, accessories, and as detailed or required for complete installations.

2.2 MISCELLANEOUS FABRICATIONS

- A. Steel Sections: Welded assemblies of standard structural shapes as required to complete the Work. Galvanize steel exposed to weather, embedded in concrete or within cavity formed by exterior veneer, unless directed otherwise.
- B. Miscellaneous Framing and Support:
 - 1. Provide miscellaneous steel framing, and supports which are not a part of structural steel framework, as required to complete work.
 - 2. Fabricate miscellaneous units to sizes, shapes and profiles shown or, if not shown, of required dimensions to receive adjacent other work to be retained by framing.
 - 3. Except as otherwise shown, fabricate from structural steel shapes and plates and steel bars of welded construction using mitered joints for field connection. Cut, drill and tap units to receive hardware and similar items.
 - 4. Fabricate components required for anchorage of fabrications of same material and finish as fabrication, except where specifically noted otherwise.
 - 5. Galvanize or prime miscellaneous framing and supports with zinc-rich primer where indicated.
- C. Form steel to accurate sizes and shapes, with clean straight lines and angles.

- 1. Fit and shop assemble in largest sections, for delivery to site.
- 2. Fabricate items with joints fitted and secured. Miter corners of frames with square or angled joints.
- 3. Form exposed connections with hairline joints, flush and smooth, using concealed fasteners wherever possible. Use exposed fasteners of type indicated, or, if none indicated, Phillips flathead (countersunk) screw or bolts.
- 4. Except where exposed bolts are detailed or indicated, do not use screws or bolts, if avoidable. When used, countersink heads and draw up tight; nick threads to prevent loosening.
- D. Bolt, drill, tap, punch, and shear to leave clean surfaces.
- E. Joints and Fastenings: Detail for ample strength and stiffness. Where exposed to weather, form to exclude water.
- F. Provide holes and connections for work of other trades.
- G. Welding:
 - 1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.
 - 2. Grind exposed welds smooth. Conform to NOMMA Guideline 1: Joint Finishes, Finish #1.
 - 3. Obtain fusion without undercut or overlap. Remove welding flux immediately.
 - 4. Make exposed joints butt tight flush, and hairline.
 - 5. Welds shall be smooth and invisible after finishing; grind exposed joints flush and smooth with adjacent surface (before galvanizing, where galvanizing indicated).
 - 6. Ease exposed edges to small uniform radius (1/32 inch unless otherwise indicated).

2.3 ACCESSORIES

- A. Fastenings, connectors, flanges, radius ells and accessories as specified, detailed or required for complete installation.
 - 1. Sleeve seams in running pipe.
 - 2. Inside Radius Ells: Seamless steel, as detailed and to suit conditions of installation.
 - 3. End Caps and Cover Caps: As detailed and to suit conditions of installation.
 - 4. Connectors: Steel, types as detailed and to suit conditions of installation.
 - 5. Other components to be as manufactured or fabricated to suit installation.
- B. Galvanizing Repair and Touch-Up for Galvanized Surfaces: Product complying with ASTM A780, for application 2.5 mils dry thickness.

2.4 GALVANIZATION

- A. Zinc-coated (galvanized) ferrous metal assemblies indicated to be galvanized. Hot-dip galvanize after fabrication and grinding in accordance with ASTM A123 (other steel products) and ASTM A153 (hardware):
 - 1. Required coating weights per square foot of actual surfaces:
 - a. Steel 3/16 inch and Less: 2.0 oz. Average; 1.8 oz. Minimum.
 - b. Steel 1/4 inch and Heavier: 2.3 oz. Average; 2.0 oz. Minimum.
 - 2. Galvanize bolts and similar threaded fasteners, in accordance with referenced Standards/ASTM A307, Class A, B, C, and D, as applicable.
 - 3. ASTM A653/A924 G90 galvanizing process (zinc with tin) for fabricated steel sheet.
 - 4. Galvanize steel exposed to weather, or that is within cavity formed by exterior siding.

2.5 SHOP FINISH/FACTORY PRIME

- A. Coordinate with Section 050513 Shop Applied Coatings.
- B. Shop Primer for Exterior, Ungalvanized Ferrous Metal Receiving Finish Coating Systems: Single component, moisture cured, micaceous iron oxide and zinc filled polyurethane (MIOZinc). Color: Green/Gray

- 1. 1. Tnemec Co, Series 394, PerimePrime
- 2. 2. Wasser, MC Miozinc 100.
- C. Where not specified, assume Tnemec, Uni-Bond, Self-Crosslinking Acrylic, Corrosion Resistant Primer Series 115 and verify with Owner.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Conform to manufacturer's instructions and provisions of Contract Documents.
- B. Protect against galvanic action from uncoated dissimilar metals. Except as otherwise indicated, embed (uncoated portion) of steel items into concrete and steel inserts with specified non-shrink grout.
- C. Fabricated Items: Install plumb and true to line. Anchor securely in place.
- D. Miscellaneous: Install metal items and fabrications as required to fully complete the Work whether specifically indicated or not.

3.2 TOUCH-UP AFTER INSTALLATION

- A. After installation and erection, remove weld spatter, grind smooth, and clean steel of oil and grease in accordance with SSPC-SP-1. Clean abraded, bolted, and welded areas.
- B. Damaged Shop Primed Ferrous Metal Surfaces: Reapply specified shop primer to make free of scratches and stains.
- C. Damaged Galvanized Surfaces to Receive Finish Coating: Touch up with specified organic, zinc rich, urethane primer.
- D. Site Welding: Clean and strip primed steel to bare metal where site welding is required and apply touch-up primer or cold galvanizing compound.

3.3 CLEAN UP

A. Leave premises clean and free from residue of work.

END OF SECTION

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes guardrails and steel pipe handrails at ramps.

1.2 REFERENCES

- A. Reference Standards: Applicable provisions of the most recent adopted editions of the following standards shall apply to the work of this Section:
- B. American National Standards Institute (ANSI): ICC/ANSI A117.1 Accessible and Useable Building Facilities.
- C. AISC
 - 1. Manual of Steel Construction
- D. ASTM International: Standards indicated herein
- E. Architectural Metal Products Division of National Association of Architectural Metal Manufacturers (NAAMM): Metal Finishes Manual for Architectural and Metal Products.
- F. NAAMM-AMP 555: Code of Standard Practice for Architectural Metal Industry
- G. The Society for Protective Coatings (SSPC): Volume 1, Good Painting Practice, and Volume 2, Systems and Specifications.
- H. Research Council on Structural Connections (RCSC): Specifications for Structural Joints Using ASTM A325 and ASTM A490 Bolts.

1.3 SUBMITTALS

- A. Product Data: Include manufacturer's publications, specifications, instructions, performance criteria, and limitations. Show conformance with specifications.
- B. Shop Drawings: Indicate profiles, sizes, connection attachments, reinforcing, anchorage, size and type of fasteners, and accessories. Include erection drawings, elevations, and details where applicable.
 - 1. Prepare placing plan locating structural connectors.
 - 2. Indicate welded connections using standard AWS A2.0 welding symbols. Indicate weld length.
- C. Certification: Submit certification letter attesting that specified shop finish preparation, procedures, and products, including galvanized plating and SSPC procedures have been followed.
- D. Samples: Steel pipe handrail, 6-inch length.

1.4 QUALITY ASSURANCE

- A. Supply setting templates for items cast into concrete and embedded in masonry.
- B. Fabricator and Installer: Company specializing in work of this Section with minimum 5 years documented experience performing commercial quality work of comparable scope.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Pack components to prevent bending, twisting, scratching of finished surfaces and other damage during shipment.
- B. Store inside building or in protected area on blocks away from dirt and moisture.

2.1 METAL GUARDRAILS & HANDRAILS:

A. Steel Pipe: ASTM A53, Type E or Type S, Grade A or Grade B, standard weight, Schedule 40.

2.2 PIPE AND TUBE HANDRAIL AND RAILING SYSTEM COMPONENTS

- A. Inside Radius Ells: Seamless steel with radius ell wall return fittings at railing ends and railing corners.
- B. Flanges: 10 gauge steel.
- C. Connectors: Coped, drive-on type, welded.
- D. Wedge-lock Welding Connectors: Types to suit conditions and as recommended by manufacturer.
- E. Other Components: Fabricate of steel to match pipe material, including railings, inserts, and sleeves as necessary to suit installation.

2.3 ACCESSORIES

- A. Expandable Grout for Pipe Rails: Conforming to ASTM C827.
- B. Fasteners and Anchors: Stainless steel designed for intended use and function, and as instructed by manufacturer.
 - 1. Wood Framing and Backing: Steel: Hex head lag screws.
- C. Connections: Weld steel to steel including railing and bracket connections, unless otherwise indicated.
- D. Auto-Body Joint Fillers: Bondo, or other accepted auto-body filler as needed to make welded and other permanent connections smooth and uniform after grinding smooth for materials to be primed and painted.
- E. Miscellaneous Items: Provide all other steel and iron items indicated or required to complete the work.

2.4 FABRICATION

- A. Fit and shop assemble components in largest practical size for delivery to site.
- B. Provide anchors, plates, and other components needed to make secure, structural connections.
- C. Provide spigots, sleeves and other components to accommodate site assembly and installation.
- D. Fabricate components of same material and finish as fabrications, except where otherwise specified. Fit with matching pipe fittings, pipe ells, end plugs, and radiused returns.
- E. Construct welded structural steel assemblies:
 - 1. Conform to NOMMA, Guideline 1: Joint Finishes, Finish No. 2 and provisions of Section 055000.
 - 2. Continuously seal joined pieces by continuous welds or intermittent welds and filler.
 - 3. Grind exposed joints flush and smooth with adjacent finish surfaces.
 - 4. Butt-weld pipe members together. For long runs (40 feet maximum), fabricate with smaller diameter slip joint inserts, to accommodate movement.
- F. Make exposed joints butt tight, flush and hairline.
- G. Ease exposed edges with small uniform radius.
- H. Drill and tap holes before applying shop primer coating. Countersink and drill at unobtrusive locations.

2.5 FINISHES

- A. Surface Preparation and Shop Primer: Conform to provisions of Section 055000.
 - 1. Exterior: SSPC-SP-6, Commercial Blast Cleaning.

- B. Bolts and Other Threaded Fasteners at Exterior Assemblies: Galvanized. Conform to provisions of Section 055000.
- C. Steel Sections, Steel Pipe and Accessories:
 - 1. Shop Preparation and Shop Primer: Specified Section055000.
 - 2. Powder Coat Finish: Specified Section 050513 for installation.

PART 3 - EXECUTION

3.1 **PREPARATION**

- A. Protect surrounding areas and surfaces to preclude damage during work of this Section.
- B. Supply items required to be cast into concrete, embedded in masonry, and placed in partitions with setting templates, to appropriate Section.
- C. Protect metal surfaces where contacting cured concrete and other cementitious materials.

3.2 INSTALLATION

- A. Include accessory items indicated or as required to complete work of this Sections.
- B. Erect assemblies plumb, true to line, and secure. Use specified expandable grout. Perform welding where applicable.
- C. Separate dissimilar metals using isolation tape or coatings acceptable to Owner. Do not use bituminous coatings.
- D. Leave assemblies securely anchored, rigid, and free from defects.

3.3 ADJUSTING

- A. Touch up damage shop primer and galvanized finishes.
- B. Field touch up damaged shop primer and finish coatings following delivery to Project Site.

3.4 CLEANING

A. Leave installation area clean and free from debris resulting from work of this Section.

END OF SECTION

PART 1 GENERAL

- 1.1 SUMMARY
 - A. Section includes miscellaneous rough carpentry including but not limited to:
 - 1. Framing with dimensional lumber,
 - 2. Wood panel products including sheathing,
 - 3. Blocking and backing,
 - 4. Other miscellaneous rough carpentry incidental to the work of this contract.
 - 5. Hardware, fasteners, and other accessories.

1.2 REFERENCES

- A. Western Wood Product Association (WWPA): Western Lumber Product Use Manual Standard Grading Rules for Western Lumber.
- B. West Coast Lumber Inspection Bureau (WCLIB): No. 16 Standard Grading and Dressing Rules for West Coast Lumber.
- C. APA The Engineered Wood Products Association (APA and APA EWS):
- D. APA Product Guide Grades and Specifications.
- E. APA Product Guide Performance RatedPanels
- F. APA PS 1 Construction and Industrial Plywood (With Typical APA Trademarks).
- G. APA PS 2 Performance Standard for Wood-Based Structural-Use Panels.
- H. ASTM A123 Specifications for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products.
- I. ASTM A153 Specifications for Zinc Coating (Hot-Dip) on Iron and Steel Hardware.
- J. ASTM D1761 Standard Test Methods for Mechanical Fasteners in Wood.
- K. ASTM D5456 Specification for Evaluation of Structural Composite Lumber Products.
- L. ASTM F1667 Specifications for Driven Fasteners: Nails, Spikes, and Staples.

1.3 **DEFINITIONS**

- A. Boards or Strips: Lumber of less than 2 inches nominal (38 mm actual) size in least dimension.
- B. Dimension Lumber: Lumber of 2 inches nominal (38 mm actual) size or greater but less than 5 inches nominal (114 mm actual) size in least dimension.
- C. Exposed Framing: Framing not concealed by other construction.
- D. OSB: Oriented strand board.
- E. Timber: Lumber of 5 inches nominal (114 mm actual) size or greater in least dimension.

1.4 ACTION SUBMITTALS

- A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.
 - 1. Include data for wood-preservative treatment from chemical treatment manufacturer and certification by treating plant that treated materials comply with requirements. Indicate type of preservative used and net amount of preservative retained.
 - 2. For products receiving a waterborne treatment, include statement that moisture content of treated materials was reduced to levels specified before shipment to Project site.

- 1.5 INFORMATIONAL SUBMITTAL
 - A. Material Certificates: For dimension lumber specified to comply with minimum allowable unit stresses. Indicate species and grade selected for each use and design values approved by the ALSC Board of Review.
 - B. Evaluation Reports: For the following, from ICC-ES:
 - 1. Wood-preservative-treated wood.
 - 2. Engineered wood products.
 - 3. Power-driven fasteners.

1.6 DELIVERY, STORAGE, ANDHANDLING

A. Stack wood products flat with spacers beneath and between each bundle to provide air circulation. Protect wood products from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 PRODUCTS

2.1 WOOD PRODUCTS, GENERAL

- A. Lumber: DOC PS 20 and applicable rules of grading agencies indicated. If no grading agency is indicated, comply with the applicable rules of any rules-writing agency certified by the ALSC Board of Review. Grade lumber by an agency certified by the ALSC Board of Review to inspect and grade lumber under the rules indicated.
 - 1. Factory mark each piece of lumber with grade stamp of grading agency.
 - 2. Where nominal sizes are indicated, provide actual sizes required by DOC PS 20 for moisture content specified.
 - 3. Provide dressed lumber, S4S, unless noted otherwise.
- B. Maximum Moisture Content of Lumber: 15 percent unless otherwise indicated.

2.2 WOOD-PRESERVATIVE-TREATED LUMBER

- A. Preservative Treatment by Pressure Process: AWPA U1; Use Category UC3b.
 - 1. See the Evaluations for information about treatment chemicals.
 - 2. Preservative Chemicals: Acceptable to authorities having jurisdiction and containing no arsenic or chromium. Do not use inorganic boron (SBX) for sill plates.
- B. Kiln-dry lumber after treatment to a maximum moisture content of 19 percent. Do not use material that is warped or that does not comply with requirements for untreated material.
- C. Mark lumber with treatment quality mark of an inspection agency approved by the ALSC Board of Review.
- D. Application:
 - 1. Blocking, stripping, and similar members in connection with roofing, flashing, vapor barriers, and waterproofing.
 - 2. Wood sills, blocking, and similar concealed members in contact with concrete.
 - 3. Wood floor plates that are installed over concrete slabs-on-grade.

2.3 DIMENSION LUMBER FRAMING

- A. Load-Bearing Partitions: Construction or No. 2 grade.
 - 1. Application: Exterior walls.
 - a. Douglas fir-larch; WCLIB or WWPA.
 - b. Hem-fir; WCLIB or WWPA.

- B. Joists, Rafters, and Other Framing Not Listed Above: Construction or No. 2 grade.
 - 1. Species:
 - a. Douglas fir-larch; WCLIB or WWPA.
 - b. Hem-fir; WCLIB or WWPA.

2.4 MISCELLANEOUS LUMBER

- A. General: Provide miscellaneous lumber indicated and lumber for support or attachment of other construction, including the following:
 - 1. Blocking.
 - 2. Nailers.
- B. Dimension Lumber Items: Construction or No. 2 grade lumber of any of the following species:
 - 1. Hem-fir; WCLIB or WWPA.
 - 2. Western woods; WCLIB or WWPA.
- C. For blocking not used for attachment of other construction, Stud or No. 3 grade lumber may be used provided that it is cut and selected to eliminate defects that will interfere with its attachment and purpose.
- D. For blocking and nailers used for attachment of other construction, select and cut lumber to eliminate knots and other defects that will interfere with attachment of other work.
- E. For furring strips for installing plywood or hardboard paneling, select boards with no knots capable of producing bent-over nails and damage to paneling.

2.5 FASTENERS

- A. General: Fasteners shall be of size and type indicated and shall comply with requirements specified in this article for material and manufacture.
 - 1. Where rough carpentry is exposed to weather, in ground contact, pressure-preservative treated, or in area of high relative humidity, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.

2.6 MISCELLANEOUS MATERIALS

A. Sill-Sealer Gaskets: Closed-cell neoprene foam, 1/4 inch (6.4 mm) thick, selected from manufacturer's standard widths to suit width of sill members indicated.

PART 3 EXECUTION

- 3.1 INSTALLATION, GENERAL
 - A. Framing Standard: Comply with AF&PA's WCD 1, "Details for Conventional Wood Frame Construction," unless otherwise indicated.
 - B. Set rough carpentry to required levels and lines, with members plumb, true to line, cut, and fitted. Fit rough carpentry accurately to other construction. Locate nailers, blocking, and similar supports to comply with requirements for attaching other construction.
 - C. Install plywood backing panels by fastening to studs; coordinate locations with utilities requiring backing panels.
 - D. Install sill sealer gasket to form continuous seal between sill plates and foundation walls.

- E. Do not splice structural members between supports unless otherwise indicated.
- F. Provide blocking and framing as indicated and as required to support facing materials, fixtures, specialty items, and trim.
- G. Sort and select lumber so that natural characteristics do not interfere with installation or with fastening other materials to lumber. Do not use materials with defects that interfere with function of member or pieces that are too small to use with minimum number of joints or optimum joint arrangement.
- H. Comply with AWPA M4 for applying field treatment to cut surfaces of preservative-treated lumber.
 - 1. Use inorganic boron for items that are continuously protected from liquid water.
 - 2. ICC-ES evaluation report for fastener.
- I. Use steel common nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections between members. Install fasteners without splitting wood. Drive nails snug but do not countersink nail heads unless otherwise indicated.

3.2 WOOD BLOCKING, AND NAILER INSTALLATION

- A. Install where indicated and where required for attaching other work. Form to shapes indicated and cut as required for true line and level of attached work. Coordinate locations with other work involved.
- B. Attach items to substrates to support applied loading. Recess bolts and nuts flush with surfaces unless otherwise indicated.

3.3 WALL AND PARTITION FRAMING INSTALLATION

- A. General: Provide single bottom plate and double top plates using members of 2-inch nominal thickness whose widths equal that of studs, except single top plate may be used for non-load-bearing partitions and for load-bearing partitions where framing members bearing on partition are located directly over studs. Fasten plates to supporting construction unless otherwise indicated.
 - 1. For exterior walls, provide 2-by-4-inch nominal- size wood studs spaced 16 inches o.c. unless otherwise indicated.
 - 2. Provide continuous horizontal blocking at midheight of partitions more than 96 inches high, using members of 2-inch nominal thickness and of same width as wall or partitions.
- B. Construct corners and intersections with three or more studs, except that two studs may be used for interior non-load-bearing partitions.
- C. Frame openings with multiple studs and headers. Provide nailed header members of thickness equal to width of studs. Support headers on jamb studs.
 - 1. For load-bearing walls, provide single-jamb studs for openings 60 inches and less in width, and double-jamb studs for wider openings. Provide headers of depth indicated or, if not indicated, according to Table R502.5(1) or Table R502.5(2), as applicable, in ICC's International Residential Code for One- and Two-Family Dwellings.

3.4 RAFTER FRAMING INSTALLATION

- A. Rafters: Notch to fit exterior wall plates and toe nail or use metal framing anchors. Double rafters to form headers and trimmers at openings in roof framing, if any, and support with metal hangers. Where rafters abut at ridge, place directly opposite each other and nail to ridge member or use metal ridge hangers.
- B. Provide special framing as indicated for eaves, overhangs, dormers, and similar conditions if any.

3.5 **PROTECTION**

- A. Protect wood that has been treated with inorganic boron (SBX) from weather. If, despite protection, inorganic boron-treated wood becomes wet, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.
- B. Protect rough carpentry from weather. If, despite protection, rough carpentry becomes wet enough that moisture content exceeds that specified, apply EPA-registered borate treatment. Apply borate solution by spraying to comply with EPA-registered label.

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes wall sheathing and roof sheathing.

1.2 SUBMITTALS

A. Product Data: For each type of process and factory-fabricated product. Indicate component materials and dimensions and include construction and application details.

1.3 DELIVERY, STORAGE, AND HANDLING

A. Stack panels flat with spacers beneath and between each bundle to provide air circulation. Protect sheathing from weather by covering with waterproof sheeting, securely anchored. Provide for air circulation around stacks and under coverings.

PART 2 - PRODUCTS

2.1 WALL SHEATHING

A. Plywood Exterior Sheathing: DOC PS1-09 or DOC PS2-10 Exterior, Structural I sheathing.

- 1. Span Rating: Not less than 32/16.
- 2. Nominal Thickness: Not less than 1/2 inch.

B Plywood Interior-Exterior Sheathing: Exposure 1 CDX sheathing.

1. Nominal Thickness: Not less than 1/2 inch.

2.2 ROOF SHEATHING

A. Plywood Sheathing: DOC PS1-09 or DOC PS2-10 Exterior, Structural I sheathing.

- 1. Span Rating: Not less than 32/16.
- 2. Nominal Thickness: Not less than 1/2 inch.

2.3 FASTENERS

- A. General: Provide fasteners of size and type indicated that comply with requirements specified in this article for material and manufacture.
 - 1. For roof and wall sheathing, provide fasteners with hot-dip zinc coating complying with ASTM A 153/A 153M.
- B. Nails, Brads, and Staples: ASTM F 1667.
- C. Power-Driven Fasteners: Fastener systems with an evaluation report acceptable to authorities having jurisdiction, based on ICC-ES AC70.
- D. Screws for Fastening Sheathing to Wood Framing: ASTM C 1002.

PART 3 - EXECUTION

- 3.1 INSTALLATION, GENERAL
 - A. Do not use materials with defects that impair quality of sheathing or pieces that are too small to use with minimum number of joints or optimum joint arrangement. Arrange joints so that pieces do not span between fewer than three support members.
 - B. Cut panels at penetrations, edges, and other obstructions of work; fit tightly against abutting construction unless otherwise indicated.

- C. Securely attach to substrate by fastening as indicated, complying with the following:
 - 1. Table 2304.9.1, "Fastening Schedule," in the ICC's International Building Code.
 - 2. ICC-ES evaluation report for fastener.
- D. Use common wire nails unless otherwise indicated. Select fasteners of size that will not fully penetrate members where opposite side will be exposed to view or will receive finish materials. Make tight connections. Install fasteners without splitting wood.
- E. Coordinate wall and roof sheathing installation with flashing and joint-sealant installation so these materials are installed in sequence and manner that prevent exterior moisture from passing through completed assembly.
- F. Do not bridge building expansion joints; cut and space edges of panels to match spacing of structural support elements.
- G. Coordinate sheathing installation with installation of materials installed over sheathing so sheathing is not exposed to precipitation or left exposed at end of the workday when rain is forecast.

3.2 WOOD STRUCTURAL PANEL INSTALLATION

- A. General: Comply with applicable recommendations in APA Form No. E30, "Engineered Wood Construction Guide," for types of structural-use panels and applications indicated.
- B. Fastening Methods: Fasten panels as indicated below:
 - 1. Wall and Roof Sheathing:
 - a. A continuous bead ofglue applied to framing at edges of wall sheathing panels helps seal panel joints so sheathing functions as an air barrier.
 - b. Nail to wood framing.
 - c. Space panels 1/8 inch (3 mm) apart at edges and ends.

PART 1 GENERAL

1.1 SUMMARY

A. Section includes vertical sheet waterproofing and adhesive.

1.2 REFERENCES

A. ASTM International (ASTM):

1.	ASTM C578	-	Specifications for Rigid, Cellular Polystyrene Thermal Insulation
2.	ASTM D5	-	Standard Test Method for Penetration of Bituminous Materials.
3.	ASTM D36	-	Standard Test Method for Softening Point of Bitumen (Ring-and-Ball Apparatus).
4.	ASTM D41	-	Standard Specification for Asphalt Primer Used in Roofing, Dampproofing, and Waterproofing
5.	ASTM D113	-	Standard Test Method for Ductility of Bituminous Materials
6.	ASTM D146	-	Standard Test Methods for Sampling and Testing Bitumen-
			Saturated Felts and Woven Fabrics for Roofing and Waterproofing
7.	ASTM D1004	-	Standard Test Method for Initial Tear Resistance of Plastic Film and Sheeting.
8.	ASTM D1668	-	Standard Specification for Glass Fabrics (Woven and Treated) for Roofing and Waterproofing.
9.	ASTM D4479	-	Standard Specification for Asphalt Roof Coatings - Asbestos-Free
10.	ASTM D6506	-	Standard Specification for Asphalt Based Protection Board for Below-Grade Waterproofing
11.	ASTM E96	-	Standard Test Methods for Water Vapor Transmission of Materials
12.	ASTM E154	-	Standard Test Methods for Water Vapor Retarders Used in Contact with Earth Under Concrete Slabs, on Walls, or as Ground Cover

1.3 SUBMITTALS

- A. Product Data: Manufacturer's current product literature indicating performance characteristics, limitations, recommendations, and standard details.
- B. Samples: Sheet membrane, adhesive, termination bars, and components of system.
- C. Manufacturer Certification: Certify installer as trained and acceptable to manufacturer under quality control provisions.
- D. Sample Warranty: Submit manufacturer's warranty.
- E. Manufacturer's Instructions: Include installation instructions, special procedures, and perimeter conditions requiring special attention.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. Company specializing in work with minimum 3 years documented experience of comparable scope.
 - 2. Trained and authorized as qualified by manufacturer for work or accepted by Owner prior to Bid Date.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Conform to manufacturer's instructions.
- B. Deliver in manufacturer's original containers with identifying labels intact indicating name, brand, and date of manufacture.
- C. Store under cover and protected from environmental damage and construction activities.

1.6 PROJECT CONDITIONS

- A. Environmental Conditions:
 - 1. Summer Grade Materials: 55 degrees F to 125 degrees F.
 - 2. Spring/Fall Grade Materials: 40 degrees F to 75 degrees F.
 - 3. Winter Grade Materials: 0 degrees F to 75 degrees F.
 - 4. Do not apply during wet weather or when temperatures are below 0 degrees F.

1.7 WARRANTY

- A. Manufacturer: Standard 10-year Warranty against waterproofing failure to resist waterpenetration, except structural failure of substrate.
- B. Contractor: Contractor: 2-year labor and equipment Warranty. Provide repairs to membrane system due to failure of waterproofing to resist penetration of water.

PART 2 PRODUCTS

2.1 SYSTEMS

- A. Vertical Sheet Waterproofing: Two-ply system.
 - 1. Modified bitumen woven fiberglass reinforced sheet waterproofing.
 - 2. Modified butyl adhesive.
 - 3. Rigid insulation protection course.

2.2 MANUFACTURERS

- A. Laurenco Incorporated.
 - 1. Cell (206) 484-8236, Email norcoe@msn.com (Jim Sullivan,
 - 2. Cell (866) 321-3339, Fax 800-543-3338, Email <u>jschultz@laurencosystems.com</u> (Jerry Schultz, Laurenco Systems, Western Regional Technical Manager)
 - 3. Web Site <u>http://www.laurencosystems.com</u>
- B. Or approved equal.

2.3 PERFORMANCE / DESIGN CRITERIA

- A. Sheet Waterproofing:
 - 1. Thickness: 50 mils (\pm 5 percent) per sheet.
 - a. Two-Ply System: 160 mils.
 - 2. Tensile Strength: Tested to ASTM D146 and ASTM E154.
 - a. Two-Ply Sheet: 180 foot-pounds per inch.
 - 3. Puncture-Resistance: Tested to ASTM E154.
 - a. Two Ply Sheet: 450 pounds.

- 4. Penetration: 30 maximum at 75 degrees F, tested to ASTM D5, using a 3 once seamless metal container.
- 5. Softening Point: 160 degrees F, tested to ASTM D36 using distilled water.
- 6. Ductility of Molded Asphalt: Tested to ASTM D113.
 - a. 10 to 12 percent at 32 degrees F using 1 cm per minute pull.
 - b. 100 to 120 percent at 75 degrees F using 5 cm per minute pull.
- 7. Ductility of Sheet: 1.36 degree bend on 1 inch outside diameter bar at 32 degrees F at 5 cm per minute minimum flex.
- B. Two Plies Sheet and Adhesive:
 - 1. Water Permeability: 0.005 grams per hour per square foot maximum, tested to ASTM E96.
 - 2. Mullens Burst Test: 430 psi, tested to ASTM D1004.
 - 3. Weather Test: Hardness of 60 within 0-99 Shore A hardness range. No changes, cracking, or crazing, tested to ASTM E529.

2.4 MATERIALS

- A. Sheet Membrane: 50 mil thick chloroprene modified asphalt filmed into woven glass fabric, conforming to ASTM D1668.
- B. Adhesive: Self-priming, semi-viscous liquid cut-back adhesive composed of synthetic rubbers conforming to ASTM D4479.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify conditions as satisfactory to receive work before beginning.
- B. Concrete Surfaces: Surface dry, clean, and free of dirt, bond breakers, fins, and sharp projections.

3.2 PREPARATION:

- A. Surface Preparation: Grout and fill voids, rock pockets, and form holes and grind to remove projects and fill depressions greater than 1/16 inch and of larger diameter than a nickel, as necessary to make smooth surface equivalent to a wood float finish.
- B. Remove latencies, splatters, dirt, and other debris and substances.
- C. Remove knife edge exterior corners and grout to smooth and continuous surfaces at interior corners.
- D. Take measures to provide ventilation at confined spaces.
- E. Application of waterproofing can proceed over green concrete as soon as formwork is removed, and concrete is not wet to touch.

3.3 VERTICAL WATERPROOFING APPLICATION

- A. Conform to manufacturer's instructions and provisions of Contract Documents.
- B. Apply minimum two-ply waterproofing at transitions and angle changes at corners, penetrations, and edges. Create 2-plys of reinforcement using reinforcement strips or through incorporating flashing and field sheets.
- C. Flash vertical interior corners with two-plies of pre-cut waterproofing sheets 12-inch wide and cut to length. Alternate: Incorporate flashing reinforcement into flashing sheet by extending flashing sheet 4-inch into horizontal plane and 5-inch into vertical plane.
 - 1. Reverse overlap subsequent sheets.
 - 2. Embed each ply sheets in applications of adhesive.

- D. Uniformly coat substrate with adhesive and allow to tack, becoming almost dry.
- E. Embed pre-cut sheet waterproofing free of wrinkles.
 - 1. Maintain 4-inch laps between sheets.
 - 2. Seal side laps with adhesive.
- F. Embed protection course into uniform coating of adhesive. Stagger joints in running bond pattern so that joints do not align.
- G. Brush or trowel coat top edges of vertical sheets for each lift with Laurenco Rubberized Flashing Cement.

3.4 FIELD QUALITY CONTROL

- A. Manufacturer's Field Services:
 - 1. Perform initial and final inspections by manufacturer's technical representative prior to covering membrane.
 - 2. Verify installation in conformance to manufacturer Warranty provisions.
- B. Verify waterproof condition prior to covering with other work.

3.5 ADJUSTING

- 1. Reapply waterproof membrane not in conformance with specifications and manufacturer's instructions.
- 2. Correct defects and irregularities to complete waterproof installation.

3.6 CLEANING

- 1. Leave installations clean and premises free from residue of work.
- 2. Remove stains from adjacent surfaces with manufacturer's recommended cleaning agents or methods.

3.7 PROTECTION OF COMPLETED WORK

1. Take precautions to protect membrane waterproofing system from damage prior to backfilling and covering.

PART 1 GENERAL

- 1.1 SUMMARY
 - A. Section includes composite sheet membrane system as required for a continuous barrier to resist air and water infiltration and the repair of existing continuous barrier including but not limited to:
 - 1. Weather Resistant Barrier ("WRB"),
 - 2. Accessories as required for installation of continuous barrier,
 - 3. Flexible Flashing
 - 4. Flexible Sill Flashing,
 - 5. Flashing Tape,
 - 6. Flashing Panels.

1.2 REFERENCES

- A. Reference Standards: Most current edition at date of Bid.
- B. ASTM International (ASTM):
 - 1. ASTM D882 Standard Test Method for Tensile Properties of Thin Plastic Sheeting
 - 2. ASTM D5034 Standard Test Method for Breaking Strength and Elongation of Textile Fabrics (Grab Test)
 - 3. ASTM E84 Standard Test Method for Surface Burning Characteristics of Building Materials
 - 4. ASTM E96 / E96M Standard Test Methods for Water Vapor Transmission of Materials
 - 5. ASTM E398 Standard Test Method for Water Vapor Transmission Rate of Sheet Materials Using Dynamic Relative Humidity Measurement

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: System components including weather resistant barrier, self-adhering tapes and other membrane flashing, fasteners, and accessories as required to complete each for each weather barrier system, as specified and published in manufacturer's product data.
- C. Warranty: Manufacturer's ten (10) Year Limited Product and Labor Sample Warranty form.

1.4 CLOSEOUT SUBMITTALS

A. Warranty: Manufacturer's ten (10) Year Limited Product and Labor Sample Warranty form; submit signed warranty to Owner at Project Closeout.

1.5 QUALITY ASSURANCE

- A. Single Source Responsibility: Furnish self-adhering membrane flashing, window flashing, corner flashing, and weather barrier membrane system as a system by a single manufacturer. Do not combine products from multiple manufacturers into a single system, except under a single source responsibility.
- B. Mock-Ups: Provide mock-ups as required to complete work of other Sections for mock-upsspecified by those Sections.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Conform to provisions of manufacturer's instructions.
- B. Deliver in manufacturer's unopened protective packaging with labels clearly visible identifying manufacturer and product.

- C. Store under cover, protected from damage, soiling, and to direct solar exposure, and with roll goods standing upright.
- D. Handle to protect from puncture and damage that may compromise product effectiveness.

PART 2 PRODUCTS

2.1 MANUFACTURERS

A. DuPont Tyvek, Benjamin Obdyke, Fortifiber Building Systems Group, Kimberly-Clark, or approved equal.

2.2 WEATHER RESISTANT BARRIER

- A. Basis of Design: Dupont Tyvek "DrainWrap," spunbonded polyolefin, non-woven, non-perforated, weather barrier and related assembly components or approved equal.
 - 1. Air Penetration: 0.004 cfm/ft² at 75 Pa, when tested in accordance with ASTM E2178. Type I per ASTM E1677.
 - 2. Drainage: >98%, when tested in accordance with ASTM E2273.
 - 3. Water Vapor Transmission: 50 perms, when tested in accordance with ASTM E96, Method B.
 - 4. Water Penetration Resistance: 210 cm when tested in accordance with AATCC Test Method 127.
 - 5. Basis Weight: 2.1 oz/yd², when tested in accordance with TAPPI Test Method T-410.
 - 6. Air Resistance: 300 seconds, when tested in accordance with TAPPI Test Method T-460.
 - 7. Tensile Strength: 30/30 lbs/in., when tested in accordance with ASTM D882, Method A.
 - 8. Tear Resistance: 7/9 lbs, when tested in accordance with ASTM D1117.
 - 9. Surface Burning Characteristics: Class A, when tested in accordance with ASTM E84. Flame Spread: 5, Smoke Developed: 25

2.3 ACCESSORIES

- A. Seam Tape
 - 1. Basis-of-Design: Three (3") inch wide, DuPont[™] Tyvek® Tape for commercial applications or approved equal.

B. Fasteners

1. Basis-of-Design: Tyvek[®] Wrap Caps for use with wood construction, as distributed byDuPont: #4 nails with large one (1")-inch plastic cap fasteners, or one (1")-inch plastic cap staples with leg length sufficient to achieve a minimum penetration of 5/8-inch into the wood stud or approved equal.

C. Sealants

1. Provide sealants that comply with ASTM C920, elastomeric polymer sealant to maintain watertight conditions. Reference Section 079200 - Joint Sealants.

D. Adhesives

- 1. Liquid Nails[®] LN-109
- 2. Denso Butyl Liquid
- 3. 3M High Strength 90
- 4. SIA 655
- 5. Adhesives recommended by the weather barrier manufacturer.
- E. Primers
 - 1. Provide flashing manufacturer recommended primer to assist in adhesion between substrate and flashing.
 - 2. Products:

- a. 3M High Strength 90
- b. Denso Butyl Spray
- c. SIA 655
- d. Permagrip 105
- e. ITW TACC Sta' Put SPH
- f. Primers recommended by the flashing manufacturer
- F. Flexible Flashing
 - 1. Basis-of-Design: DuPont[™] StraightFlash[™], as distributed by DuPont: straight flashing membrane materials for flashing windows and doors and sealing penetrations or approved equal.
- G. Flashing Tape:
 - 1. Basis-of-Design: Four (4") inch wide, DuPont[™] Flashing Tape, as distributed by DuPont: flexible membrane flashing materials for adhering metal head flashing or approved equal.
- H. Flashing Panels
 - 1. Basis-of-Design: Manufactured byQuickFlash, Inc. Size and type to suit application and conditions in field or approved equal.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify substrate and surface conditions are in accordance with weather barrier manufacturer recommended tolerances prior to installation of weather barrier and accessories.

3.2 INSTALLATION OF WEATHER RESISTANT BARRIER

- A. Conform to manufacturer's instructions and provisions of Contract Documents.
- B. Install weather barrier over exterior face of exterior wall substrate in accordance with manufacturer recommendations.
- C. Install weather barrier prior to installation of windows and doors.
- D. Start weather barrier installation at a building corner, leaving six to twelve (6"-12") inches of weather barrier extended beyond corner to overlap.
- E. Door Openings: Extend weather barrier completely over openings.
- F. Overlap weather barrier:
 - 1. Exterior corners: minimum twelve (12") inches.
 - 2. Seams: minimum six (6") inches.
- G. Weather Barrier Attachment:
 - 1. Attach weather barrier to studs through exterior sheathing. Secure using weather barrier manufacturer recommended fasteners, space twelve to eighteen (12" -18") inches vertically on center along stud line, and twenty-four (24") inches on center, maximum horizontally.

3.3 SEAMING

- A. Seal seams of weather barrier with seam tape at all vertical and horizontal overlapping seams.
- B. Seal any tears or cuts as recommended by weather barrier manufacturer.

3.4 EXIBLE FLASHING

- A. Cut seven (7") inch wide flexible sill flashing a minimum of twelve (12") inches longer than width of sill rough opening.
- B. Cover horizontal sill by aligning flexible sill flashing edge with inside edge of sill. Adhere to rough opening across sill and up jambs a minimum of six (6") inches. Secure flashing tightly into corners by working in along the sill before adhering up the jambs.
- C. Fan flexible sill flashing at bottom corners onto face of wall. Firmly press in place. Mechanically fasten fanned edges.
- D. Apply six (6") inch wide strips of flexible flashing at jambs overlapping entire mounting flange. Extend jamb flashing one (1") inch above top of rough opening and below bottom edge of sill flashing.
- E. Apply six (6") inch wide strip of flexible flashing as head flashing overlapping the mounting flange. Head flashing should extend beyond outside edges of both jamb flashings.
- F. Apply four (4") inch wide strip of flashing tape to adhere metal head flashing to sheathing.
- G. Position weather barrier head flap across head flashing. Adhere using three (3") inch wide, flashing tape over the 45-degree seams.
- H. Tape head flap in accordance with manufacturer recommendations.
- I. On interior, install backer rod in joint between frame of window and flashed rough framing. Apply sealant around entire window to create air seal. Apply sealant in accordance with sealant manufacturer's instructions and ASTM C 1193.

3.5 FIELD QUALITY CONTROL

A. Notify manufacturer's designated representative to periodically observe weather barrier assembly installation as required to obtain manufacturer's ten (10) Year Limited Product and Labor Warranty.

3.6 **PROTECTION**

A. Protect installed weather barrier from damage.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes complete roofing installation including fiberglass reinforced asphalt shingles, felt underlayment, fasteners, flashings, sealant and accessories at roofs as indicated.
 - 1. Roof systems shall comply with UL Class A Fire and Wind Resistance ratings.

1.2 REFERENCES

A. Applicable provisions of the most recent adopted edition of the following standards shall apply to the work of this Section, except as modified herein, and are hereby made a part of these Contract Specifications to the extent required:

ARMA Asphalt Roofing Manufacturers Association Manual	
ASTM B749 Standard Specification for Lead and Lead Alloy Strip, She	eet, and
Plate Products	
ASTM D226 Standard Specification for Asphalt-Saturated Organic Felt	Used
in Roofing and Waterproofing	
ASTM D3018 Standard Specification for Class A Asphalt Shingles Surfa	iced
with Mineral Granules	
ASTM D3161 Standard Test Method for Wind-Resistance of Asphalt S	Shingles
ASTM D4586 Standard Specification for Asphalt Roof Cement, Asbest	tos Free
ASTM D4601 Standard Specification for Asphalt-Coated Glass Fiber Ba	se
Sheet Used in Roofing	
ASTM D4869 Standard Specification for Asphalt-Saturated OrganicFelt	
Underlayment Used in Steep Slope Roofing	
ASTM D7158 Standard Test Method for Wind Resistance of Asphalt Shi	ingles
(Uplift Force/Uplift Resistance Method)	
ASTM E108 Standard Test Methods for Fire Tests of Roof Coverings	
NCRA NRCA Roofing and Waterproofing Manual	
UL Underwriter's Laboratories Standards	

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish for the following:
 - a. Shingles: Full size.
 - b. Ridge cap shingles: Full size.
 - c. Ridge vent: 12-inch long sample.
- C. Certification: Written statement, signed by manufacturer's authorized representative, certifying installer as conforming to qualifications specified this Section.
- D. Sample Warranty: Meet or exceed provisions specified by this Section.

1.4 CLOSEOUT SUBMITTALS:

- 1. Manufacturers Product Warranty.
- 2. Maintenance Data.

1.5 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide American-made products of acceptable manufacturers, which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

1.6 WARRANTY:

- A. Submit manufacturer's standard warranty. Include labor and materials to repair or replace defective materials.
 - 1. Standard Product Warranty: Manufacturer's warranty against manufacturing defects.
 - a. 30-years from date of Substantial Completion.
 - 2. Standard Product Warranty Algae: Manufacturer's warranty, agreeing to repair or replace shingles that fail to resist discoloration or staining due to algae growth.
 - a. 20- years from date of Substantial Completion.
 - 3. Standard Product Warranty Wind: Manufacturer's warranty, agreeing to repair or replace shingles with damage caused by winds up to 110 mph.
 - a. 10- years from date of Substantial Completion.
 - 4. Special Project Warranty: Watertight and weatherproof warranty signed by installer covering work of this Section.
 - a. 2-years from date of Substantial Completion.
 - 5. Ridge Vents: Provide manufacturer's standard 30-year Warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. GAF, Pabco, CertainTeed, Georgia Pacific Corp, Owens-Corning Fiberglass, or approved equal.

2.2 MATERIALS

- A. Fiberglass Reinforced Asphalt Shingles:
 - 1. Basis of Design: Marquis WeatherMax Shingles by GAF or approved equal.
 - 2. Color: Selected by Owner from Manufacturer's standard colors.
- B. Starter Strip:
 - Self-sealing starter shingle designed for premium roof shingles. Each bundle covers approx. 100 lineal feet for shingles or 50 lineal feet for oversized shingles. WeatherBlocker[™] Eave/Rake Starter Strip by GAF or approved equal.
- C. Leak Barrier:
 - 1. Self-adhering, self-sealing, bituminous leak barrier surfaced with fine, skid-resistant granules. Approved by UL, Dade County, ICC, State of Florida and Texas Department of Insurance. Each roll contains approx. 150 sq. ft., 36" X 50' or 200 sq ft, 36" X 66.7'. WeatherWatch® Leak Barrier by GAF or approved equal.
- D. Underlayment:
 - Synthetic, non-asphaltic, non-woven, anti-skid back coated, polypropylene constructed non breathable underlayment. Meets or exceeds ASTM D226 and D4869 approved by UL, Florida Building Code, ICC and CSA A220.1. Each roll contains approximately 10 squares (1000 gross sq. ft.) of material and is 48 in. x 250 ft., Tiger-PawTM Roof Deck Protection byGAF or approved equal.
 - 2. Number of layers: 2

- E. Flashing:
 - 1. Metal flashing and trim: Comply with requirements in Section 076200 Sheet Metal Flashing and Trim.
- F. Accessories:
 - 1. Fasteners: hot dip galvanized roofing nails or aluminum 10-12 gauge barbed shank; 3/8" head, sharp pointed conventional, of sufficient length to penetrate through wood sheathing. NO staples allowed.
 - 2. Bituminous Plastic Cement: Henry 204 Plastic Roof Cement or approved equal.
- G. Roof-to-Wall Vent:
 - 1. Basis of Design: Cor-A-Vent Roof-2-Wall Vent
 - 2. Color: Black

PART 3 - EXECUTION

- 3.1 EXAMINATION
 - A. Verify substrate and surface conditions are in accordance with asphalt shingle manufacturer recommended tolerances prior to installation of asphalt shingle and accessories.

3.2 INSTALLATION

A. Conform to manufacturer's instructions, NRCA Roofing and Waterproofing Manual, and provisions of Contract Documents. Where in conflict, verify with Owner before beginning work.

3.3 TEMPORARY ROOF (AIR & VAPOR BARRIERS)

A. Air and Vapor Barriers noted in this section, and related roofing sections are to be installed per manufacturer's requirements to act as a temporary, weatherproof roof immediately after the barrier substrate is installed to avoid potential water damage during installation of roofing components that occur after the air and vapor barrier.

3.4 UNDERLAYMENT INSTALLATION

- A. Install continuously over plywood roof sheathing.
- B. Install under metal edge flashing at rake and over metal edge flashing at eave.
- C. Leak Barrier: Install at eaves, rakes, ridges, hips, and valleys. Lap, stagger, and fasten as recommended in writing by manufacturer. Cover leak barrier within period recommended in writing by manufacturer.
- D. Synthetic Underlayment: Install on roof deck parallel with and starting at the eaves. Lap sides and ends and treat laps as recommended in writing by manufacturer. Stagger end laps between succeeding courses at interval recommended in writing by manufacturer. Fasten according to manufacturer's written instructions. Cover underlayment within period recommended in writing by manufacturer.
- E. Protect from moisture during and between applications.
- F. Repair damaged underlayment prior to shingle installation.

3.5 SHEET METAL INSTALLATION

- A. Sheet Metal Drip Edges: Set in bed of mastic and nail or screw in place.
 - 1. Eaves: Install directly over plywood deck. Overlap or clip into gutters to prevent water flow between gutter and fascia.

2. Rakes: Install over underlayment.

3.6 ASPHALT-SHINGLE INSTALLATION

- A. General: Install asphalt shingles according to manufacturer's written instructions, recommendations in ARMA's "Residential Asphalt Roofing Manual," and recommendations in NRCA's "NRCA Guidelines for Asphalt Shingle Roof Systems."
- B. Install starter strip along lowest roof edge, consisting of an asphalt-shingle strip with tabs removed with self-sealing strip face up at roof edge.
 - 1. Extend asphalt shingles 1/2 inch over fascia at eaves and rakes.
 - 2. Install starter strip along rake edge.
- C. Install first and remaining courses of asphalt shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure.
- D. Install first and remaining courses of asphalt shingles stair-stepping diagonally across roof deck with manufacturer's recommended offset pattern at succeeding courses, maintaining uniform exposure.
- E. Install asphalt shingles by single-strip column or racking method, maintaining uniform exposure. Install full-length first course followed by cut second course, repeating alternating pattern in succeeding courses.
- F. Fasten asphalt-shingle strips with a minimum of four roofing nails located according to manufacturer's written instructions.
 - 1. Where roof slope is less than 4:12, seal asphalt shingles with asphalt roofing cement spots.
 - 2. When ambient temperature during installation is below 50 deg F, seal asphalt shingles with asphalt roofing cement spots.

3.7 PROTECTION

- A. Stage work progress so that traffic is minimized over completed roofing.
- B. Protect installed products until completion of project.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes installation of fiber cement siding including but not limited to:
 - 1. Fiber cement lap siding and trim,
 - 2. Fasteners, flashing, sealants and accessories.

1.2 REFERENCES

- A. American Society of Civil Engineers (ASCE) 7 Minimum Design Loads for Buildings and Other Structures.
- B. ASTM International (ASTM):
 - 1. ASTM E 72 Standard Test Methods of Conducting Strength Tests of Panels for Building Construction; 2010
 - 2. ATSM E 84 Standard Test Method for Surface Burning Characteristics of Building Materials
 - 3. ASTM E 96 Standard Test Methods for Water Vapor Transmission of Materials; 2010. H
 - 4. ASTM E136 Standard Test Method for Behavior of Materials in a Vertical Tube Furnace at 750 degrees C
 - 5. ASTM C 1185 Standard Test Methods for Sampling and Testing Non-Asbestos Fiber-Cement Flat Sheet, Roofing and Siding Shingles, and Clapboards; 2008
 - 6. ASTM C1186 Standard Specification for Flat, Non-Asbestos, Fiber-Cement Sheets

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications: Minimum three (3) years documented experience in work of this Section.
- B. Obtain all siding materials from a single source manufacturer.
- C. Mockup:
 - 1. Size: Minimum 4 x 8 feet
 - 2. Show: Weather resistant barrier, siding, trim, flashings and joint sealers. Include one (1) window, and one (1) external corner.
 - 3. Location to be coordinated with Owner.
 - 4. Approved mockup may remain as part of the Work.
- D. Pre-Installation Conference:
 - 1. Convene at site two (2) weeks prior to beginning work of this Section.
 - 2. Attendance: Owner, Contractor, siding system installer and related trades.
 - 3. Review and discuss: Contract Documents, siding system manufacturer's literature, moisture barrier requirements, project conditions, scheduling and other matters affecting installation.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store off the ground, under cover. Maintain dry and well ventilated.
- B. Stack siding planks on edge or laid flat on smooth, level surface.

PART 1 - GENERAL

1.1 SUMMARY

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 - 1. Fiber cement lap siding and trim,
 - 2. Fasteners, flashing, sealants and accessories.

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 - 3. Location to be coordinated with Owner.
 - 4. Approved mockup may remain as part of the Work.
- D. Pre-Installation Conference:
 - 1. Convene at site two (2) weeks prior to beginning work of this Section.
 - 2. Attendance: Owner, Contractor, siding system installer and related trades.
 - 3. Review and discuss: Contract Documents, siding system manufacturer's literature, moisture barrier requirements, project conditions, scheduling and other matters affecting installation.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Store off the ground, under cover. Maintain dry and well ventilated.
- B. Stack siding planks on edge or laid flat on smooth, level surface.

C. Protect from dirt, dampness, and damage. Protect edges from chipping. Discard damaged pieces.

1.6 WARRANTIES

- A. Provide manufacturer's non-pro-rated thirty (30) year warranty providing coverage against hail and termite damage and defects in materials and workmanship.
- B. Provide installer's two (2) year warranty providing coverage against defects in installation. This is an extension of the Contractor's standard one (1) year warranty.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Basis of Design: Products and systems by James Hardie Commercial. Dave Hughes, Tel. (253) 315-5317, <u>www.jameshardie.com</u> or approved equal.

2.2 MATERIALS

- A. Fiber Cement Siding & Trim System
 - 1. Meet ASTM C1186, Grade A, Type II
 - 2. Formulated from Portland cement, ground sand, cellulose fibers, additives, and water; formed under pressure to required profile
 - 3. Surface texture: Smooth
 - 4. Fire hazard classification: Maximum flame spread/smoke developed rating of 0/5, tested to ASTM E84
 - 5. Combustibility; Noncombustible, tested to ASTM E136
 - 6. Lap Siding
 - a. Size: 8-1/4" planks with 7" exposure
 - b. Thickness: 5/16 inch
 - c. Surface Texture- Smooth
 - 7. Trim
 - a. Length: 12 ft, nominal
 - b. 1" x various widths: 3-1/2", 5-1/2", 7-1/4", 9-1/4" & 11-1/4" noted perDrawings.
 - 8. Finish: Factory prime painted, for field-applied paint finish
 - 9. Color: As indicated in Section 099100 Painting and plan page A3.1.
- B. Fasteners: Stainless steel, T or pan head type as recommended by panel manufacturer, of equal or greater holding power than required by manufacturer's Code compliance reports; length as required to penetrate minimum 1-1/4 inch (32 mm); sized and nailing pattern per manufacturer's printed data.
- C. Sheet Metal Flashings and Trim: Specified in Section 076200 Sheet Metal Flashing and Trim.
- D. Edge Sealer: Type recommended by siding manufacturer.
- E. Joint Sealers: Specified in Section 079200 Joint Sealers.
- F. Field Finish Paint: Specified 099100 Painting.

PART 3 - EXECUTION

- 3.1 INSPECTION
 - A. Examine substrate and clean and repair as required to eliminate conditions that would be detrimental to proper installation.
 - B. Verify that weather barrier has been installed over substrate completely and correctly.
 - C. Do not begin until unacceptable conditions have been corrected. Correct conditions detrimental to timely and proper completion of work.

D. Any work which is not acceptable due to a discrepancy which has not been called to the attention of the Owner shall be repaired or replaced to conform to the original intent of the drawings at no additional cost to the Owner.

3.2 PREPARATION

- A. Coordinate installation of sheet metal flashing indicated in the Drawings and specified in Section 076200 Sheet Metal Flashing and Trim. Include miscellaneous flashings needed for completion of a weathertight envelope and incidental to the work of this Contract.
- B. Cut fiber-cement siding planks by scoring and breaking or cutting with tools as instructed by manufacturer to give sharp clean edges.

3.3 INSTALLATION

- A. Install fiber cement siding system in accordance with manufacturer's instructions and approved Shop Drawings.
 - 1. Read warranty and comply with all terms necessary to maintain warranty coverage.
 - 2. Install in accordance with conditions stated in model code evaluation report applicable to location of project.
 - 3. Use trim details indicated on drawings.
 - 4. Touch up all field cut edges before installing. (Need to prime all cut edges)
 - 5. Pre-drill nail holes if necessary to prevent breakage.
- B. Over Wood and Plywood Sheathing: Fasten siding through sheathing into studs or into the sheathing as permitted by the manufacturer's installation instructions.
- C. Fasten siding system at maximum spacing per manufacturer's Code compliance reports. Place fasteners exposed, minimum 3/8 inch from panel edges and 2 inches from top and bottom edges at panel corners, in orderly fastening pattern.
- D. Provide minimum six (6") inch clearance between siding system and finished grade.
- E. Leave gap between horizontal drainage flashings and bottom of siding above. Do not seal this space.
- F. Locate splices at least twelve (12") inches away from window and door openings.
- G. Allow minimum vertical clearance between edge of siding system and adjacent materials in accordance with manufacturer's instructions.
- H. Cut to fit around penetrations with maximum ¹/₄-inch gap. Smooth and seal cut edges.
- I. Lap siding to be installed with a reveal as noted in the Drawings and per manufacturer's recommendations. Blind nailing (fastening each piece such that the lap above it covers the fastener) is to be done according to manufacturer's recommendations.
 - 1. Joints in Horizontal Siding: Avoid joints in lap siding except at corners; where joints are inevitable stagger joints between successive courses. Follow manufacturer's installation instructions for treatment of butt joints.
- J. Apply joint sealer between panel system and adjacent surfaces as specified in Section 079200 Joint Sealants except at horizontal drainage flashings. Do not seal lap joints or vertical joints of lap siding. Paint all exposed cut edges.

3.2 TOLERANCES

- A. Maximum Variation from Plumb and Level: 1/4 inch per ten (10') feet.
- B. Maximum Offset From Joint Alignment: 1/16 inch.

3.3 ADJUSTING

A. Repair or replace damaged siding and installations not meeting specified tolerances.

B. Remove and replace siding with edge chips exceeding 1/4 inch in depth or 1/2 in length or showing other avoidable defects.

3.4 CLEANING

- A. Clean and wash factory primed exposed surfaces with mild soap and rinse with water.
- B. Leave installations clean, premises free from residue of work of this section, ready for field painting specified in Section 099100 Painting.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section includes miscellaneous exterior flashing including but not limited to:
 - 1. Flashings, counter-flashings, drip edges and the like as required for a weather-tightinstallation,
 - 2. Gutters, gutter debris protection, and downspouts,
 - 3. Miscellaneous flexible flashing and sealants as required for weather-tight performance.

1.2 REFERENCES

- A. Applicable provisions of the following standards shall apply to the work of this Section, except as modified herein, and are hereby made a part of these Contract Specifications to the extent required:
 - 1. ASTM A240-05 Standard Specification for Chromium and Chromium-Nickel Stainless Steel Plate, Sheet, and Strip for Pressure Vessels and for General Applications
 - 2. ASTM B32-04 Standard Specification for Solder Metal
 - 3. ASTM B370-03 Standard Specification for Copper Sheet and Strip for Building Construction
 - 4. FS SS-C-153C Cement, Bituminous, Plastic
 - 5. SMACNA Architectural Sheet Metal Manual, 6th edition 2003

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.
- C. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish, including but not limited to gutters, downspouts and gutter debris protection.

1.4 DELIVERY, STORAGE AND HANDLING

- A. Conform to SMACNA recommendations.
- B. Deliver, store, and handle to protect from twisting, soiling, scratching, and other damage.
- C. Do not store in direct sunlight, metal with strippable protective film.

1.5 WARRANTY

- A. Pre-Finished Steel Sheet and Coil Coating Warranty: Manufacturer's 20-year Warranty against fading, color change, chalking, peeling, cracking, or delaminating.
- B. Contractor Warranty: Warranty work of this Section to be waterproof and weather-tight against ordinary wear and usage for two (2) years from date of Substantial Completion, including material and labor. This is an extension of the standard one (1)-year warranty.

PART 2 - PRODUCTS

- 2.1 GENERAL
 - A. Sheet metal not otherwise called for to be minimum gauges per SMACNA for comparable construction. Use heavier gauges where required by conditions of installation.
 - B. Materials shall be best quality, thickness not less than that noted below.

2.2 MATERIALS

- A. Flashing Material: Fabricate from prefinished G90 galvanized sheet steel, 24 gauge, Kynar 500 (PVDF) finish. Color as selected by Owner from manufacturer's standard to match existing flashing.
 - 1. Perimeter edge flashings: Fabricate to detail. Provide minimum six (6") inch end-laps set in two (2) continuous beads of sealant.
 - 2. Clips and cleats: 20 gauge minimum.
 - 3. Miscellaneous flashings and counter-flashings not noted above.
- B. Sill Pan Material: Fabricate from stainless steel, ASTM A240, Type 304, dead soft fully annealed, 0.018-inch thick, smooth surface, Number 4 finish.
 - 1. Fabricate to detail. Form end dams each side and solder to prevent water migration.

2.2 FASTENERS

- A. Nails shall be hot-dip galvanized or stainless steel. Bolts, and nuts, power driven fasteners, screws, washers, etc., shall be hot-dip galvanized or stainless steel. Exposed fasteners shall be a high-dome, neoprene gasketed, hex head type, or incorporate a washer with a laminated neoprene gasket. Concealed sheet metal fasteners shall be No. 12 to 14, panhead, self-drilling, self-tapping, non-corrosive fasteners, and as instructed by manufacturer.
- B. Silicone rubber washers.

2.3 ACCESSORIES

- A. Plastic Cement (as applicable): In accordance with referenced FS SS-C-153, TypeI-asphaltic.
- B. Electrolytic Protection to separate dissimilar materials: Cold-applied asphalt-mastic complying with SSPC-Paint 12 requirements, containing no asbestos, formulated for 30-mil thickness percoat.
- C. Solder (as applicable): Conform to ASTM B32, commercial quality, type suited to material to be soldered.
- D. Miscellaneous Materials: Provide other incidental and accessory materials, methods, tools and equipment. Include materials of sheet metal, flashing and trim required.
 - 1. Uncured Butyl Tape. ¹/₄"x1" Minimum.
 - 2. Flexible Flashing: Specified 072500
- E. Sealant: Specified Section 079200 Joint Sealants.
- F. Stainless Steel Sheet: Scuppers, saddle flashings, sill pans, and other fabrications requiring soldered joints.
 - 1. ASTM A240 or ASTM A666, Type 304, soft temper ("dead soft") unless required to be harder for proper forging and performance in application indicated; fully annealed; smooth surface; 2D finish, unless otherwise indicated.
 - 2. Exterior Exposed Stainless Steel: 2B mill finish.

2.3 FABRICATION

- A. Conform to SMACNA and as detailed. Conform to following general requirements:
 - 1. Form sections true to shape, accurate in size, square and free from distortion or defects.
 - 2. Fabricate cleats and starter strips same material as sheet, in widths required by SMACNA, interlockable with sheet.
 - 3. Form pieces in longest practical lengths.
 - 4. Provide expansion joints at minimum forty (40') foot intervals or as required by SMACNA or as indicated.
 - 5. Hem exposed edges on underside one-half (1/2") inch; fabricate separate corner pieces.
 - 6. Form material with cover plate type seam; butt adjacent sections to within one-eighth (1/8") inch, set cover plate under seam, minimum length of plate twelve (12") inches unless noted otherwise.

- 7. Fabricate vertical faces with bottom edge formed outward one-quarter (1/4") inch and hemmed to form drip.
- 8. Cap neat ends as required or indicated.
- B. Flashing:
 - 1. As detailed and in accordance with SMACNA. Self-supporting flashing 24 gage minimum.
 - 2. Provide folded end dams at ends of horizontal flashing.
 - 3. Seal laps. Provide a minimum six (6") inch end lap and seal with two (2) continuous beads of approved sealant.
- C. Sill Flashings: Fabricate to detail.
- D. Accessories: Furnish and install as indicated required by conditions of installation. Items of same materials as items to which applied.
- E. Solder and seal metal joints.
 - 1. After soldering, remove flux.
 - 2. Wipe and wash solder joints clean.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install in conformance to SMACNA, NRCA, and provisions of the Contract Documents.
- B. Install flashings, counter flashings, copings, and other sheet metal fabrications to detail, conforming to SMACNA recommendations and as required for watertight installations.
- C. Flash joints, terminations, and penetrations at roofing, door and window frames, and other construction.
- D. Neatly form and finish joints and seams. Make lines, moldings, and edges sharp and true. Reinforce as required for stiffness.
- E. Make surfaces free from waves and buckles. Build in expansion joints and make other provisions to allow for thermal expansion and contraction to prevent distortion and oil-canning.
- F. Slope copings and other horizontal installations for positive drainage to shed water.
- G. End Laps and Side Laps: Minimum 6-inch overlap with 2 continuous beads of non-skinning butyl and as required to make watertight.
- H. Form sheet metal shapes with minimum 4-inch-wide flanges.
- I. Fasteners:
 - 1. Install exposed fasteners at concealed locations and concealed clips at exposed locations, except as otherwise accepted by Architect.
 - 2. Space fasteners conforming to provisions of SMACNA and NRCA.
 - 3. Install additional fasteners at each side of end laps as necessary secure flashing end laps from water intrusion.
 - 4. Seal penetrations through sheet metal and flashings by lapping with air barrier or with sealant.
- J. Electrolytic Protection: Prevent galvanic action where dissimilar metals are in galvanic range of each other. Separate with tape, bituminous protective backing, 2 coats of bituminous paint, or other isolation methods.
- K. Flexible Flashing: Specified Section 072500 Weather Resistant Barrier.
 - 1. Use flexible flashing and accessory materials in coordinated fashion with metal flashings and other waterproofing materials so as to achieve absolutely watertight, sealed, properly shingled and drainable assemblies.
 - 2. Install per manufacturer recommendations.

- 3. Pre-treat substrates to be flashed where required for adequate adhesion.
- 4. Overlap adjacent pieces three to four (3-4") inches with sealant and roll overlaps with a steel hand roller or blunt object. Shingle laps for proper drainage.
- 5. Seal metal flashing at tops, laps, terminations, and end dams with flexible flashing and mastic.
- 6. At horizontal terminations for flashing, turn up ends a minimum of two (2") inches, cut and make careful folds to form a pan and seal with mastic.
- 7. Apply a bead or trowel coat of mastic along top edges, seams, cuts and penetrations.
- 8. Shingle end dams.
- 9. Seal penetrations through flashing with mastic.
- L. Sweat Soldering:
 - 1. Pre-tin edges of sheet metal to a width of 1-1/2" inches before beginning soldering.
 - 2. Fully sweat solder joints to a minimum depth of ¹/₂" by applying heat from iron to upper sheet, drawing solder fully into joint below.

3.2 JOINT SEALERS

- A. Conform to provisions of Section 079200 Joint Sealers and NRCA Manual, as required to make weather tight joints.
- B. Overlapping Metal Flashing Joints: Install lap sealant at copings, reglets, counterflashing, gutters, and other continuous flashing joint overlaps.
 - 1. Install minimum one bead of butyl bedding sealant between flashing overlaps.
 - 2. Seal exposed open ends of flashing with silicon joint sealant.
 - 3. Install bead of butyl or silicone sealant at joints under cap flashing and overlapped flashing. Install minimum one bead of butyl bedding sealant or silicone sealant on each side of joint.
 - 4. Install one bead of butyl bedding sealant or silicone sealant between substrate and flush mounted reglets, termination bars, and other overlaps or metal to metal or metal to other construction.
 - 5. Do not compress sealant beads between overlapping flashing.
- C. Sheet Metal Cover Plates: At cover plates under metal flashing joints, set minimum two beads of butyl bedding sealant between sheet metal at each side of joint.

3.3 ADJUSTING

- A. Make adjustments to make installations plumb and true to line.
- B. Repair installations as required to make watertight.
- C. Touch up scratched or marred surfaces to match adjacent finishes.

3.4 CLEANING

A. Leave installations clean, free from residue and debris from work of this Section.

PART 1 GENERAL

1.1 SUMMARY

A. Section includes but is not limited to general sealant work required for weather-tight installation of work of this Contract.

1.2 REFERENCES

- A. Applicable provisions of the following standards shall apply to the work of this Section, except as modified herein, and are hereby made a part of these Contract Specifications to the extent required:
 - 1. ASTM C661 Test Method for Indentation hardness of Elastomeric –Type Sealants by Means of a Durometer
 - 2. ASTM C719 Standard Test Method for Adhesion and Cohesion of Elastomeric Joint Sealants Under Cyclic Movement (Hockman Cycle)
 - 3. ASTM C834 Specification for Latex Sealing Compounds
 - 4. ASTM C920 Specification for Elastomeric Joint Sealants
 - 5. ASTM C1193 Standard Guide for Use of Joint Sealants
 - 6. ASTM C1330 Standard Specification for Cylindrical Sealant Backing for Use with Cold Liquid Applied Sealants
 - 7. ASTM D2240 Standard Test Method for Rubber Property—Durometer Hardness
 - 8. ASTM D5893 Standard Specification for Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Pavements
- B. Sealant, Waterproofing & Restoration Institute (SWRI), Tel. (816) 472-7979. Fax: (816) 472-7765, Email info@swrionline.org / Web Site http://www.swrionline.org

1.3 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Samples: Submit two representative samples of each material specified indicating visual characteristics and finish. Include range samples if variation of finish is anticipated.

1.4 QUALITY ASSURANCE

- A. Installer Qualifications:
 - 1. Applicator shall have at least three (3) years' experience in installing materials of types specified and shall have successfully completed at least three (3) projects of similar scope and complexity.
 - 2. Applicator shall designate a single individual as project foreman who shall be on site at all times during installation.
- B. Single Source Responsibility for Joint Sealant Materials:
 - 1. Obtain joint sealants from a single manufacturer for each different product required to ensure compatibility.
 - 2. Manufacturer shall instruct applicator in procedures for intersecting sealants.

1.5 ENVIRONMENTAL REQUIREMENTS

- A. Do not apply materials when temperature or weather conditions deviate from manufacturer's recommendations. Comply with manufacturer's recommended requirements for temperatures, relative humidity and substrate moisture content during application and curing of materials.
- B. Ensure proper ventilation in areas to receive solvent and moisture cured materials, and inenclosed spaces when installing two-component foam sealant.

C. Comply with manufacturer's MSDS Sheets for use and handling of products.

1.6 SEQUENCING AND SCHEDULING

- A. Do not install work of this Section until work of other trades having an effect on this Section of work has been completed.
- B. Schedule applications of waterproofing, water repellents and preservative finishes after sealant installation unless sealant manufacturer approves otherwise in writing. Ensure that installed sealant is allowed to cure sufficiently prior to subsequent applications.

1.7 WARRANTY

- A. Deliver to the Owner signed copies of the following written warranties against adhesive and cohesive failure of the sealant and against infiltration of water and air through the sealed joint for a period of five (5) years from date of completion.
 - 1. Manufacturer's standard warranty covering sealant materials.
 - 2. Applicator's standard warranty covering workmanship.

PART 2 PRODUCTS

2.1 MATERIALS

- A. General:
 - 1. Color: White, or as selected by Owner from samples of manufacturer's standard color range.
 - 2. Sealant must be compatible with back-up material.
 - 3. Compatibility:
 - a. Provide joint sealants, joint fillers and accessory joint materials that are compatible with one another and with joint substrates under project conditions.
 - b. Install joint sealants, joint fillers and related joint materials that are non-staining to visible joint surfaces and surrounding substrate surfaces.
 - 4. Pre-compressed foam joint sealant backup sealant at masonry and other rainscreen weather joints.
 - 5. Sealing of vertical and horizontal construction joints, making air and watertight.
 - 6. Primers: As required and recommended by the sealant manufacturer for surface conditions encountered.

2.2 SILICONE JOINT SEALANTS:

- A. As manufactured by: Dow Corning Corp, Sika Corporation, Tremco Incorporated or accepted.
- B. Silicone Joint Sealants:
 - 1. Single-Component, Non-sag, Neutral-Curing Silicone Joint Sealant: ASTM C920, Type S, Grade NS, Class 100/50, for Use NT.

2.3 JOINT SEALANT BACKING

- A. Joint-Sealant Backing: ASTM C1330, polyethylene foam rod, closed or open cell to suit job conditions and approved in writing by joint sealant manufacturer; non-staining; compatible withjoint substrates, sealants, primers and other joint fillers; and accepted for applications indicated by sealant manufacturer based on field experience and laboratory testing.
 - 1. Diameter twenty-five (25%) percent greater than width of joint where it is to be installed.
 - 2. Polystyrene foam not acceptable.

B. Bond-Breaker Tape: Polyethylene tape or other plastic tape recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint-filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

2.4 MISCELLANEOUS MATERIALS

- A. Primer: Material recommended by joint-sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint-sealant-substrate tests and field tests.
- B. Cleaners for Nonporous Surfaces: chemical cleaners acceptable to manufacturers of sealants and sealant backing materials, free of oily residues or other substances capable of staining or harming joint substrates and adjacent nonporous surfaces in any way, and formulated to promote optimum adhesion of sealants to joint substrates.
- C. Masking Tape: Non-staining, non-absorbent material compatible with joint sealants and surfaces adjacent to joints.
- D. Firestop Joint Sealants (flamesafe sealant): Elastomeric sealing material intended to resist the passage of fire and toxic gasses in non-fire-resistance rated assemblies, acceptable to AHJ.
- E. Other Materials: Provide other materials, not specifically described but required for a complete and proper installation, as selected by the Contractor and approved by the sealant manufacturer as compatible, subject to review of the Owner.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Coordinate as required with other trades to assure proper and adequate provision in the work of those trades for interface with the work of this Section.
- B. Applicator shall examine the areas and conditions under which work of this Section will be performed.
 - 1. Verify conformance with manufacturer's requirements.
 - 2. Report unsatisfactory conditions in writing to the Owner.
 - 3. Do not proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Clean and prime joints in accordance with manufacturer's instructions.
- B. Remove loose materials and foreign matter which might impair adhesion of sealant.
- C. Verify that joint backing and release tapes are compatible with sealant.
- D. Completely protect surfaces adjacent to joints. Apply masking around joints to protect adjacent surfaces from defacement and staining during sealing operations.

3.3 INSTALLATION, APPLICATION, PERFORMANCE

- A. Install in accordance with manufacturer's directions for conditions of installation.
- B. Apply sealants before application of water repellents or other coatings at surfaces to ensure sealant adhesion.
- C. Keep sealants back from adjacent faces of surfaces.
- D. Backing for surfaces:
 - 1. Apply foam rod back-up material allowing proper space for sealant per the sealant manufacturer's data guide.
 - a. Where more than 3/4" wide pack with foam backer rod material to within 1/2" of surface

- b. Where less than 1/2" wide install foam rod backer rod material to within 1/4" of surface.
- 2. Where less than 1/2" deep, apply bond breaker tape to bottom of joints to prevent adhesion of sealant to bottom of joint.
- 3. Provide backing materials in as long lengths as practicable; install with proper tool. Force backing into joint to proper depth for sealant.
- E. Sealing: Recess joints as indicated; minimum recess equal to joint width.
 - 1. Apply sealant in accordance with manufacturer's directions and the following:
 - a. Use sealant dispensing equipment to push sealant bead into opening. Fill joint opening to full and proper configuration. Apply in continuous operation, ensure sealant fills entire joint and firmly contacts all surfaces.
 - b. Install sealant vertically or horizontally as necessary to allow moisture to drain.
 - 2. Examine installation carefully. Repair any areas where sealant is not properly adhered due to bubbles, foreign matter or other defects.
 - 3. Seal joints before final coat of finish is applied to adjacent surfaces.

3.4 CURING

- A. General: Prior to painting or coating, allow sealant joints to cure as directed by sealant manufacturer, minimum seven (7) days for a single component and three (3) days for a multi-component.
- B. Environmental Conditions: Ambient temperatures and humidity affect the cure rate and time required for joint to be "tack-free". Notify Owner if cure times exceed the minimums listed.
 - 1. Repair sealants pulled from test area by applying new sealants following same procedures used originally to seal joints. Ensure that original sealant surfaces are clean and that new sealant contacts original sealant.
- C. Evaluation of Field Test Results: Sealants not evidencing adhesive failure from testing or noncompliance with other indicated requirements will be considered satisfactory. Remove sealants that fail to adhere to joint substrates during testing or to comply with other requirements. Retest failed applications until test results prove sealants comply with indicated requirements.

3.5 CLEANING, INSPECTION AND PROTECTION

- A. Clean off excess sealant or sealant smears adjacent to joints as the Work progresses by methods and with cleaning materials accepted in writing by manufacturers of joint sealants and of products in which joints occur.
- B. Protect joint sealants during and after curing period from contact with contaminating substances and from damage resulting from construction operations or other causes so sealants are without deterioration or damage at time of Substantial Completion. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so installations with repaired areas are indistinguishable from original work.

C.

3.6 SCHEDULE

JOINT SEALANT	APPLICATION				
Single-Component Neutral Curing Silicone Sealant	 Exterior joins in exterior finish systems Exterior perimeter joints at frames of doors, and windows Exterior control and expansion joints inceilings and other overhead surfaces All other exterior vertical and horizontal nontraffic joints unless noted otherwise 				
Single-Component Mildew-Resistant Neutral- Curing Silicone Sealant	• Exterior joints with galvanized steel				

PART 1 GENERAL

1.1 SUMMARY

A. Section includes fiberglass storage doors installed in new openings.

1.2 REFERENCES

- A. American Society for Testing and Materials (ASTM):
 - 1. ASTM E 331 Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference
- B. Environmental Protection Agency and Department of Energy:
 - 1. Energy Star Program Requirements Product Specification for Residential Windows, Doors, and Skylights.
- C. Code of Federal Regulations:
 - 1. CFR 1201 Part 2 Safety Standard for Architectural Glazing Materials
- D. National Fire Protection Association
 - 1. NFPA 252 Standard Methods of Fire Tests of Door Assemblies
- E. Underwriters Laboratory
 - 1. UL 10B Standard for Fire Testing Door Assemblies
 - 2. UL 10C Standard for Positive Pressure Fire Tests of Door Assemblies

1.3 SUBMITTALS

- A. Product Data: Submit door manufacturer's current product literature, including installation instructions.
- B. Samples: Submit full-size or partial full-size verification sample of door illustrating quality of construction, texture and color of finish.

1.4 QUALITY ASSURANCE

- A. Mockup:
 - 1. Provide sample unit of representative product size and using manufacturer's approved installation methods to determine acceptability of door installation methods.
 - 2. Approved mockup shall represent minimum quality required for the work.
 - 3. Approved mockup shall remain in place.
- B. Quality Assurance Submittals:
 - 1. Provide documentation for specified performance as required.
 - 2. Manufacturer's installation instructions.

1.5 DELIVERY, STORAGE AND HANDLING

- A. Delivery: Deliver materials to site undamaged with labels clearly identifying manufacturer, product name and installation instructions
- B. Storage: Store materials in an upright position, off ground, under cover and protected from weather, direct sunlight, and construction activities.
- C. Handling: protect materials and finish during handling and installation to prevent damage.

1.6 WARRANTY

A. Manufacturer's standard limited warranty applies.

PART 2 PRODUCTS

- 2.1 MANUFACTURER
 - A. Therma-Tru Corp. Fiberglass Entry Doors or accepted. Therma-Tru products specified as basis of design. Refer to Section 016000 for Substitution requirements.

2.2 MATERIALS

- A. Fibgerglass Storage Doors (Mark 1):
 - 1. Smooth Star Flush Panel Door, Model: S100.
 - 2. Frames: Composite, paintable. 5-1/2". Factory primed and doors pre-hung for specified hinges. Include Therma-tru integral door gaskets.
 - 3. Door Threshold: Therma-Tru.
- B. Additional Door Hardware: Specified in Section 087100 Door Hardware.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine areas to receive doors. Notify Owner in writing of any unacceptable conditions that would adversely affect installation or subsequent performance of the product. Do not proceed with installation until unsatisfactory conditions are corrected.

3.2 INSTALLATION

- A. Pre-hang doors in frames specified.
- B. Install doors in accordance with manufacturer's written instructions and best practice.

3.3 FINISHING

A. Finish specified 099100 Painting.

3.4 PROTECTION

- A. Protect installed products until completion of project.
- B. Touch-up, repair or replace damaged products prior to Substantial Completion in accordance with specifications.

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes hardware for fiberglass storage doors including but not limited to:
 - 1. Locksets, hinges, stops, sweeps and thresholds.
 - 2. Weatherstripping, seals and door gaskets.
 - 3. Provide complete finish hardware and suitable fastenings for the Project in accordance with Drawings, Specifications and Schedules.
 - 4. Furnishing items of proper design for use on doors and frames of the thickness, profile, swing, security and similar requirements indicated, as necessary for proper installation and function.
 - 5. Furnishing items not specifically mentioned, but necessary to complete work. These are to match quality and finish of the items specified.
 - 6. Coordinate keying with Owner. Unit doors to be supplied with five (5) keys each door.
 - 7. Quantities: Those listed in any instance are for Subcontractor's convenience only and are not guaranteed.

1.2 REFERENCE STANDARDS

- A. 36 CFR 1191 Americans with Disabilities Act Accessibility Guidelines for Buildings and Facilities; Final Rule; current edition; (ADA Standards for Accessible Design).
- B. ANSI/ICC A117.1 American National Standard for Accessible and Usable Buildings and Facilities; International Code Council; 2009.
- C. BHMA A156.1 American National Standard for Butts and Hinges; Builders Hardware Manufacturers Association, Inc.; 2006 (ANSI/BHMA A156.1).
- D. BHMA A156.2 American National Standard for Bored and Preassembled Locks & Latches; Builders Hardware Manufacturers Association; 2011 (ANSI/BHMA A156.2).
- E. E. BHMA A156.4 American National Standard for Door Controls Closers; Builders Hardware Manufacturers Association, Inc.; 2008 (ANSI/BHMA A156.4).
- F. BHMA A156.6 American National Standard for Architectural Door Trim; Builders Hardware Manufacturers Association; 2010 (ANSI/BHMA A156.6).
- G. BHMA A156.7 American National Standard for Template Hinge Dimensions; Builders Hardware Manufacturers Association; 2003 (ANSI/BHMA A156.7).
- H. BHMA A156.8 American National Standard for Door Controls Overhead Stops and Holders; Builders Hardware Manufacturers Association, Inc.; 2010 (ANSI/BHMAA156.8).
- I. BHMA A156.13 American National Standard for Mortise Locks & Latches; Builders Hardware Manufacturers Association; 2005 (ANSI/BHMA A156.13).
- J. BHMA A156.17 American National Standard for Self Closing Hinges & Pivots; Builders Hardware Manufacturers Association, Inc.; 2004 (ANSI/BHMA A156.17).
- K. BHMA A156.18 American National Standard for Materials and Finishes; Builders Hardware Manufacturers Association, Inc.; 2006 (ANSI/BHMA A156.18).
- L. BHMA A156.22 American National Standard for Door Gasketing and Edge Seal Systems, Builders Hardware Manufacturers Association; 2012 (ANSI/BHMA A156.22).
- M. DHI (LOCS) Recommended Locations for Architectural Hardware for Standard Steel Doors and Frames; Door and Hardware Institute; 2010.
- N. NFPA 80 Standard for Fire Doors and Other Opening Protectives;2013.
- O. UL (BMD) Building Materials Directory; Underwriters Laboratories Inc.; current edition.

1.3 COORDINATION

- A. Coordinate the manufacture, fabrication, and installation of products onto which door hardware will be installed.
- B. Furnish templates for door and frame preparation to manufacturers and fabricators of products requiring internal reinforcement for door hardware.
- C. Convey Owner's keying requirements to manufactures during the Work.
- D. Pre-installation Meeting: Convene a pre-installation meeting one (1) week prior to commencing work of this section; require attendance by all affected installers.
- E. Sequence installation to ensure utility connections are achieved in an orderly and expeditious manner.

1.4 SUBMITTALS

- A. Product Data: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project.
- B. Hardware Schedule: Manufacturer's catalog literature for each type of hardware, marked to clearly show products to be furnished for this project. Submit manufacturer's parts lists, templates and special tools.
- C. Keying Schedule: Owner will provide- Storage locks keyed to match front door keying schedule.
- D. Manufacturer's Installation Instructions: Indicate special procedures, perimeter conditions requiring special attention.
- E. Maintenance Data: Include data on operating hardware, lubrication requirements and inspection procedures related to preventative maintenance.
- F. Submit manufacturer's parts lists and templates.
- G. Operation and Maintenance shall be included in Project Operation and Maintenance Manuals. To include in manuals: catalog cuts, manufactures names, address and phone numbers.
- H. Keys: Deliver with identifying tags to Owner by security shipment direct from hardware supplier.
- I. Warranty: Submit manufacturer's warranty and ensure that forms have been completed in Owner's name and registered with manufacturer.

1.5 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three (3) years of documented experience.
- B. Hardware Supplier Qualifications: Company specializing in supplying commercial door hardware approved by manufacturer.
 - 1. Supplier to maintain stock and parts inventory of all standard items for future service by the Owner.
 - 2. Authorized representatives for locksets are to inspect and adjust their hardware.
 - 3. To be factory direct authorized distributor not a broker.
- C. To be staffed with a certified Architectural Hardware Consultant (AHC) and locksmiths available at all reasonable times during construction to meet with Owner, and Contractor for hardware or keying problems.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Package hardware items individually; label and identify each package with door opening code to match hardware schedule.
- B. Storage of hardware shall be protected, under lock and key, and storage kept dry for protection of the hardware.

PART 2 PRODUCTS

- 2.1 DOOR HARDWARE GENERAL
 - A. Provide all hardware specified or required to make doors fully functional, compliant with applicable codes and secure to the extent indicated.
 - B. Provide all items of a single type of the same model by the same manufacturer.
 - C. Provide products that comply with the following:
 - 1. Applicable provisions of Federal, State and local codes.
 - 2. ADA Standards for Accessible Design.
 - 3. ANSI/ICC A117.1, American National Standard for Accessible and Usable Buildings and Facilities.
 - 4. Applicable provisions of NFPA 101, Life Safety Code.
 - 5. Fire-Rated Doors: NFPA 80.
 - 6. All Hardware on Fire-Rated Doors: Listed and classified by UL as suitable for the purpose specified and indicated.
 - 7. Hardware for Smoke and Draft Control Doors (Indicated as "S" on Drawings): Provide hardware that enables door assembly to comply with air leakage requirements of the applicable code.
 - 8. Products Requiring Electrical Connection: Listed and classified by UL as suitable for the purpose specified and indicated.
 - D. Finishes: All door hardware the same finish unless otherwise indicated.
 - 1. Primary Finish: Satin chrome plated over nickel on brass or bronze, 626 (approxUS26D).
 - 2. Finish Definitions: BHMA A156.18.
 - 3. Exceptions:
 - a. Where base metal is specified to be different, provide finish that is an appearance equivalent according to BHMA A156.18.

2.2 HINGES AND PIVOTS

- A. Hinges, Pivots and Butts: Provide hinges on every swingingdoor.
 - 1. Provide five-knuckle full mortise butt hinges unless otherwise indicated.
 - 2. Provide ball bearing hinges for in-swinging doors.
 - 3. Provide hinges in the quantities indicated.
 - 4. Provide non-removable pins on exterior outswinging doors.
 - 5. Provide hinges in the quantities indicated.
- B. Butt Hinges: Comply with BHMA A156.1 and A156.7; standard weight, unless otherwise indicated.
 - 1. Provide hinge width required to clear surrounding trim.
- C. Quantity of Hinges Per Door:
 - 1. Three (3) hinges per leaf to 7 feet, 6-inch height. Add one for each additional 30 inches in height or any fraction.
- D. Approved manufacturers:
 - 1. Ives: <u>www.ives.allegion.com</u>
 - 2. Therma-Tru: <u>www.thermatru.com</u>
 - 3. Hager Companies: <u>www.hagerco.com</u>
 - 4. Bommer Industries, Inc.: <u>www.bommer.com</u>

2.3 LOCKS

- A. Locks: Provide a lock for every door, unless specifically indicated as not requiring locking.
 - 1. Hardware Sets indicate locking functions required for each door.
 - 2. Trim: Provide lever handle or pull trim on outside of all locks unless specifically stated to have no outside trim.
 - 3. Lock Cylinders: Provide key access on outside of all locks unless specifically stated to have no locking or no outside trim.

B. Lock Cylinders: Manufacturer's full size interchangeable core (FSIC) six (6) pin cylinder. February 10, 2023

- 1. Provide cams and/or tailpieces as required for locking devices required.
- C. Keying: Grand master keyed per Owners approval.

2.4 CYLINDRICAL LOCKSETS

- A. Locking Functions: As defined in BHMA A156.2, and as selected by Owner.
- B Approved manufacturers:
 - 1. Schlage: <u>www.schlage.com</u>

2.5 STOPS AND HOLDERS

- A. Stops/Holders: Complying with BHMA A156.8; provide a stop for every swinging door, unless otherwise indicated.
 - 1. Provide wall mounted stops and floor mounted stops where wall mounted is impractical. Where no stop can be installed provide closer with cushion type arm. Anvils to be sufficient length to permit closers to be mounted on the pull side of the door.
 - 2. If wall stops are not practical, due to configuration of room or furnishings, provide overhead stop.
 - 3. Stop is not required if positive stop feature is specified for door closer; positive stop feature of door closer is not an acceptable substitute for a stop unless specifically so stated.

B. Approved Manufacturers:

- 1. Ives: <u>www.ives.allegion.com</u>
- 2. Glynn-Johnson: <u>www.glynn-johnson.com</u>.
- 3. Trimco: www.trimcobbw.com

2.6 GASKETING, DOOR BOTTOMS, AND THRESHOLDS

- A. Gaskets: Comply with BHMA A156.22
 - 1. On each exterior door, provide weatherstripping gaskets, unless otherwise indicated; top, sides, and meeting stiles of pairs.
 - a. Where exterior door is also required to have fire or smoke rating, provide gaskets functioning as both smoke and weather seals.
- B. Door Bottoms:
 - 1. On each exterior door, provide door bottom shoe or sweep, unless otherwise indicated.
- C. Thresholds:
 - 1. At each exterior door, provide door manufacturers standard threshold.
 - 2. Provide threshold elevator at exterior doors.
 - 3. Use Pemko 183_SN for gaps over ¼" between threshold and Fiber Cement trim board or concrete slab.
- D. Silencers:
 - 1. Quantity: Furnish three (3) for each single door frame.
- E. Approved manufacturers:1. Therma-Tru: <u>www.thermatru.com</u>

2.7 KEYING REQUIREMENTS

- A. Key Management System: For each keyed lock on project, provide one set of consecutively numbered duplicated key tags with hanging hole and snap catch.
- B. All keyed cylinders shall be subject to the existing Schlage Grand Masterkey system, coordinate with Owner.
- C. Furnish cylinders with construction cores. Following construction supply permanent keyed cores.
- D. Key Quantities
 - 1. Four (4) Master Keys.
 - 2. Four (4) Control Keys.
 - 3. Four (4) Change Keys for each lock at storage doors
 - 4. Four (4) Keys per keyed alike group.
 - 5. Six (6) Extra Cores set of two (2). Two (2) Cores keyed alike per set.

3.1 EXAMINATION

- A. Verify that field conditions are acceptable and are ready to receive work.
- B. In the event of any discrepancies between job site conditions and the drawings, stop work immediately. Immediately call the Owner and report the nature, extent and impact of the discrepancy. Do not proceed with any and all work relating to the discrepancy until a resolution has been attained.
- C. Commencement of construction or installation means acceptance of existing conditions by contractor as suitable for construction or installation.
- D. Any work which is not acceptable due to a discrepancy which has not been called to the attention of the Owner shall be repaired or replaced to conform to the original intent of the drawings at no additional cost to the owner.
- E. Verify that doors and frames are ready to receive work; labeled, fire-rated doors and frames are present and properly installed, and dimensions are as instructed by the manufacturer.

3.2 INSTALLATION

- A. Install hardware in accordance with manufacturer's instructions and applicable codes.
- B. Use templates provided by hardware item manufacturer.
- C. Install hardware on fire-rated doors and frames in accordance with code and NFPA 80.
- D. Mounting heights for hardware from finished floor to center line of hardware item. Comply with DHI "Recommended Locations for Architectural Hardware for Wood Flush Doors."

3.3 ADJUSTING

- A. Hardware damaged by improper installation or adjustment methods to be repaired or replaced to the Owner's satisfaction.
- B. Adjust hardware for smooth operation.
- C. Replace units which cannot be adjusted to operate freely and smoothly.

PART 4 HARDWARE SETS

- 4.1 GENERAL
 - A. These Hardware Sets indicate requirements for single doors of that type, with conditional requirements for pairs and other situations.

HW 01 – STORAGE DOOR (101)

3	EA	HINGE	5PB1 4" X 4" NRP	630	IVES
1	EA	PASSAGE SET	F10ELA	626	SCHLAGE
1	EA	SGL CYL DEADBOLT	B660R	626	SCHLAGE
1	EA	CONVENTIONAL CORE	23-030C	626	SCHLAGE
1	EA	RAIN DRIP	346C	AL	PEMKO
1	EA	DOOR STOP	060	652	IVES
1	EA	SEAL	BY FIBERGLASS DOOR MFG		B/O
1	EA	DOOR SWEEP	223ANB	А	PEMKO
1	EA	THRESHOLD	COMPOSITE ADJUSTABLE		MMI ENDURA

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes painting of fiber cement siding and trim, fiberglass entrance doors, and other exterior surfaces as required for a complete paint job. Work includes:
 - 1. Surface preparation,
 - 2. Field applied primers, sealers, coatings and paints,
 - 3. Pre-paint off-site all interior finish trim,
 - 4. Painting and coating schedule.

1.2 REFERENCES

- A. ASTM International (ASTM):
 - 1. ASTM D523 Standard Test Method for Specular Gloss.
 - 2. ASTM D5324 Standard Guide for Testing Water-Borne Architectural Coatings.
- B. The Master Painters Institute (MPI): Tel 1-888-674-8937, Fax 1-888-211-8708, Email_ info@paintinfo.com, Web Site http://www.paintinfo.com
 - 1. MPI Approved Product List.
 - 2. MPI Architectural Painting Specification Manual.
- C. United States Environmental Protection Agency (EPA):
 - EPA 40 CFR Part 59 (AD-FRL-6149-71 RIN 2060 National Volatile Organic Compound Emission Standards for Architectural Coatings, Final Rule, Federal Register / Vol. 63, No.176, September 11, 1998/Rules and Regulations.]
 - 2. Web Site http://www.epa.gov/ttn/uatw/183e/aim/fr1191.txt

1.3 COORDINATION

- A. Refer to Section 013100 Project Management and Coordination for additional requirements including the following:
 - 1. Pre-Installation Conference:
 - a. Attendance: Contractor, painting subcontractor, Owner and others as requested to attend.
 - b. Meeting Time: Minimum two (2)weeks before beginning work of this Section and work of related Sections affecting work of this Section and as necessary to meet Project Schedule.
 - c. Location: Project Site.

1.4 SUBMITTALS

- A. Product Data: Provide in the same order as scheduled by this Section:
 - 1. Manufacturer's Product Data Sheets for each product.
 - 2. Product/Label Analysis for paint products:
 - a. Pigment and vehicle percentages by weight.
 - b. Pigment composition analysis, including fillers in percent by weight.
 - c. Vehicle composition analysis, including resins, solvents and additives by weight.
 - 3. Material Data Safety Sheets (MSDS):
 - a. Solvents, driers, additives and fillers.
 - b. Volatile organic compounds (VOC) emissions in grams per liter.
- B. Chip Color Samples: Manufacturer's complete selection.
- C. Paint Drawdown Color Samples: Size not less than 8 by 10 (8"x10") inch draw-down for each color selected for final acceptance prior to beginning work.

- 1. Label back of each drawdown with manufacturer, product, color name and number, and gloss level.
- 2. Furnish additional samples as required for acceptance of colors, finishes and textures.
- 3. Retain approved samples for reference.

1.5 CLOSEOUT SUBMITTALS

- A. Maintenance Data: Product data sheets, manufacturer's application instructions, MSDS, product color name and number, cleaning instructions and spot repair and repaint instructions.
- B. Invoices and other data as necessary to verify quantities of each paint product suitable for coverage in conformance to manufacturer's instructions.

1.6 MAINTENANCE MATERIAL SUBMITTALS

- A. Minimum one (1) gallon of each paint and coating type and color.
- B. Identify each container as to manufacturer, product, color name, and number with minimum five (5") inch press type. Tape over with clear tape.
- C. Include manufacturer's instructions and SDS for each product submitted
- D. Turn over to Owner prior to project completion. Obtain signed receipt.

1.7 QUALITY ASSURANCE

- A. Manufacturer Qualifications:
 - 1. Manufacturer: Employ full time, locally available architectural product representative, technical field representative, testing equipment and services as necessary to perform inspections and to determine compliance with manufacturer's instructions and provisions of Contract Documents.
- B. Applicator Qualifications:
 - 1. Able to document minimum ten (10) years continuous experience in commercial quality projects of similar type and scope.
 - 2. Employ qualified journeymen painters with apprentices under direction of qualified journeymen, conforming to trade regulations.
- C. Field Samples:
 - 1. Minimum three (3), ten (10) square foot area field sample for each accepted color and substrate type. Provide as a step-down field sample, showing each step of system, including surface preparation.
 - 2. Locate as accepted by Owner.
 - 3. Protect and retain accepted field samples as standard of quality for work of this Section.
 - 4. Accepted field samples may be incorporated into finished work.
- D. Work of this Section to be performed by or under direct supervision of one (1) installer.
- E. Apre-application meeting per General Requirements is required between all parties including painting Sub-contractor, Contractor, paint manufacturer's representative and Owner before work of these sections begin.

1.8 DELIVERY, STORAGE AND HANDLING

- A. Conform to manufacturer's instructions.
- B. Deliver in unopened, sealed containers, bearing manufacturer's original labels with manufacturer's brand name, product name and number, color designation, surface preparation, mixing and reducing

instructions, coverage, drying time, clean-up instructions, MSDS and VOC content. Include invoice statements showing quantities of each paint product. Submit to Owner upon request as a means to verify quantities suitable for coverage.

- C. Store and utilize paint in original containers bearing manufacturer's label for ease of identification. Do not put paint in containers bearing labels for other products.
- D. Store at ambient temperature between 45 degrees F and 90 degrees F. Store and mix material outside building.
- E. Take special safety precautions against hazards from toxic and flammable materials.
- F. Place paint and solvent contaminated cloths and materials, subject to spontaneous combustion, in containers and remove from job site each day.

1.9 FIELD CONDITIONS

- A. Environmental Requirements: Do not apply paints and coatings at surface and air temperatures below 50 degrees F, except as specified by this Section or as instructed or accepted by manufacturer.
- B. Weather: Do not apply exterior coatings when precipitation is predicted or appears imminent.
- C. Ventilation: Maintain continuous air exchange ventilation. Move moisture, odors and fumes from painting to outside of building.
- D. Illumination: Maintain lighting level of 50 foot candles measured at mid height at substrate surfaces.

1.10 WARRANTY

A. Manufacturer: Five (5) year materials warranty.

PART 2 PRODUCTS

2.1 MANUFACTURERS:

A. The following manufacturers are acceptable: Benjamin Moore, Kelly-Moore, Miller Paint Company, Rodda Paint, Cloverdale and Sherwin-Williams. Benjamin Moore products are specified as the basis of design.

2.2 PERFORMANCE CRITERIA

- A. Single Source Responsibility: Supply primers, intermediate and finish coats for each paint and coating system from a single manufacturer, except as otherwise specified.
- B. Surface Preparation: Conform to MPI Architectural Painting Specifications Manual, SSPC, manufacturer's instructions and provisions of this Section for work as needed to prepare substrates to be free of conditions that may impair adhesion and uniformity.
 - 1. Remove bond breakers, dust, foreign matter and surface irregularities.
 - 2. Prepare to prevent bleed-through of substrate material.
- C. Paint System Application: Conform to MPI Architectural Painting Specifications Manual and manufacturer's instructions.
 - 1. Paint Grade: Conform to Premium Grade, except as otherwise specified.
 - a. Minimum one (1) primer coat and two (2) finish coats, except as otherwise specified.
 - b. Additional coats as necessary to cover with no holidays or other surface imperfections.
 - 2. Dry film thickness (DFT) and wet film thickness (WFT), as instructed by manufacturer.

2.3 MATERIALS

- A. Painting and Coating Schedule: Refer to Schedule at end of this Section for products specified for specific finishes.
- B. Surfaces Not Scheduled for Paints and Coatings: Where unscheduled surfaces are discovered following Bid, assume premium commercial quality paint or coating, meeting or exceeding Approved Product List, and as instructed by manufacturer's technical representative. Submit to Owner for acceptance prior to beginning work.
- C. Coatings: Ready mixed, except catalyzed coatings. Process pigments to consistency for uniform and homogeneous coatings, good flow and brushing qualities, drying or curing free of streaks and sags.

2.4 GLOSS AND SHEEN LEVELS

A. Conform to Gloss and Sheen Levels as tested in accordance with ASTM D523, regardless of that stated by manufacturer product data and shown on paint containers.

GLOSS AND SHE	EN LEVELS	GLOSS @ 60 DEGREES	SHEEN @ 85 DEGREES
Gloss Level 1	Matt or Flat	Maximum 5 Units	Maximum 10 Units
Gloss Level 2	Low Sheen	Maximum 10 Units	10 to 35 Units
Gloss Level 3	Eggshell	10 to 25 Units	10 to 35 Units
Gloss Level 4	Satin	20 to 35 Units	Minimum 35 Units
Gloss Level 5	Semi-Gloss	35 to 70 Units	(N/A)
Gloss Level 6	Gloss	70 to 85 Units	(N/A)
Gloss Level 7	High Gloss	More than 85 Units	(N/A)

2.5 FINISHES AND COLORS

- A. Field Painting Product Systems and Gloss Levels: Refer to Schedule at end of this Section.
- B. Paint Colors: Refer to Schedule at end of this Section, or as accepted by Owner.

PART 3 EXECUTION

3.1 EXAMINATION

- A. Verify conditions ready to receive work of this Section before beginning work.
- B. Arrange for adequate lighting, temporary heat, and ventilation.
- C. Maximum Moisture Content of Substrates: Conform to manufacturer's instructions and guidelines. Perform tests using commercial quality electronic moisture meter. Where exceeding following values, promptly notify Owner and obtain direction before beginning work.
 - 1. Exterior Wood: Fifteen (15%) percent.

3.2 MATERIALS TO BE FINISHED

- A. Prepare and finish surfaces of materials, except as specifically excluded or otherwise specified.
- B. Field paint exposed-to-view surfaces, whether or not indicated to receive coatings, except where specifically excluded by Contract Documents.

3.3 MATERIALS NOT TO BE FINISHED

- A. Metals: Brass, bronze, copper, stainless steel, pre-finished metal and plated metals other than galvanized metal, except as specifically indicated.
- B. Plastic laminate, melamine and other finished plastic surfacing.
- C. Roofing, masonry, stone and concrete, except as otherwise indicated.

- D. Glass and clear plastic, except as otherwise indicated.
- E. Substrates with specified factory-applied colored finishes and normally unfinished substrates:
 - 1. Includes: Door hardware, electrical switch plates, and lighting fixtures.
 - 2. Exception: Wire mold and other normally prefinished items mounted on surfaces receiving coatings: Paint out to match and blend with field surface.
- F. Inaccessible materials permanently enclosed behind building construction and structural components.

3.4 SURFACE PREPARATION UNDER WORK OF OTHER SECTIONS

A. Field Substrate Preparation Specified Under Work of Related Sections: Crack free, finished, clean as needed to make substrates suitable for primers and finished coats specified for work of this Section, except minimal spot filling, spackling and other preparation normally performed by work of this Section.

3.5 SURFACE PREPARATION PROCEDURES

- A. Conform to:
 - 1. MPI Architectural Painting Specification Manual, Surface Preparation.
 - 2. SSPC- Surface Preparation Procedures.
 - 3. Manufacturer's instructions.
 - 4. Contract Document provisions.
- B. Wood Products Receiving Opaque Finishes:
 - 1. Clean to remove dirt, bond breakers and all material that is not suitable for paint adhesion to substrate. Remove and replace rotten, cracked, delaminated or water damaged wood prior to applying prime coat.
 - 2. Scape and sand smooth all knots and pitch streaks prior to applying prime coat.
 - 3. Remove loose and peeling paint. Sand surface smooth.
 - 4. Sand hard glossy surfaces to create profile to promote adhesion of paint coating.
 - 5. Wipe off dust and minor grit prior to applying prime coat.
 - 6. Fill nail holes and fine cracks after primer has dried.
 - 7. Sand smooth and level with surface, ready for finish coat.
 - 8. Seal joints between wood surfaces specified 079200.
 - 9. Maintain surface condition for subsequent finish coats.
- C. Back Priming Wood:
 - 1. Prior to installation, back prime concealed faces of panels, moldings, siding and other thin wood, plywood and panel material subject to warping and bowing.
 - 2. Apply two (2) coats of sealer, primer or suitable finish system to balance finish on exposed face.
- D. Surfaces Not Specified by MPI, SSPC, or manufacturer's Instructions: Verify with Owner for surface preparation procedures.

3.6 RECOATING SURFACE PREPARATION

A. Prepare existing coated substrates as needed to make suitable for work of this Section. Proceed as for new work following initial preparation conforming to Architectural Painting Specification Manual, Surface Preparation, manufacturer's instructions and Contract Document provisions.

- B. Wood, Prior to Recoating:
 - 1. Remove and clean existing deteriorated painted surface down to sound substrate, suitable for new coatings.
 - 2. Sand thick and sharp edges to make feather-edge transitions needed to prevent telegraphing through finished paint surface.
 - 3. Fill and patch checks, blemishes and deteriorated surfaces.

3.7 PROTECTION

- A. Take measures to protect surfaces not receiving work of this Section including protection from overspray, adjacent surfaces and downwind surfaces.
 - 1. Provide drop cloths, shields and protective equipment.
 - 2. Repair or replace damaged surfaces caused by failure to provide suitable protection.
- B. Remove or mask electrical outlets and switch plates, mechanical diffusers, escutcheons, registers, surface hardware, fittings, fastenings and other items not receiving coating system.
- C. Correct minor defects and clean substrate surfaces included under work of this Section.
- D. Remove coatings that exhibit surface defects or unsuitable surface adhesion.

3.8 APPLICATION

- A. Conform to manufacturer's instructions, Architectural Painting Specification Manual and provisions of Contract Documents.
- B. Conform to Premium Grade, including application of two (2) finish coats over prepared and primed substrates.
- C. Apply as many additional coats for complete coverage and for acceptable finished appearance, free of holidays and color irregularities.
- D. Back-roll, back-brush and perform other work as necessary to lay down gypsum board fuzz, push spray-applied coatings into surfaces, and to even out and make for smooth, uniform coated surfaces.
- E. Apply primer and each finish coat in slightly different hue as means to verify multiple coat coverage.
- F. Conform to manufacturer's instructions for wet film and dry film thickness of coatings.
 - 1. Verify wet film thickness (WFT) by use of wet film gage during application.
 - 2. Test dry film thickness (DFT) using Tooke or other accepted measuring device.

3.9 PATCHING

A. Repair surfaces damaged during construction activities. Spot repair and refinish as necessary for finished appearance prior to Substantial Completion and Owner occupancy.

3.10 REPLACEMENT OF HARDWARE AND MISCELLANEOUS ITEMS

- A. Reinstall items previously removed for painting, including hardware, electrical plates.
- B. Manufacturer's Field Services: Conduct field services by manufacturer's local senior technical field representative.
 - 1. Attend Pre-Construction Conference, view mockups, make intermittent site visits, make final site visit at project completion.
 - 2. Verify conformance to manufacturer's instructions and provisions of Contract Documents for products and procedures.
 - 3. Provide technical assistance to help achieve high quality results.
 - a. Verify mil thickness with wet film gauge, in selected locations.
 - b. Test surfaces with Tooke or approved dry film gauge, for total DFT in selected areas.

4. Promptly notify Owner of suspected non-conforming work and other irregularities.

3.11 ADJUSTING

A. Take measures as necessary and as directed by Owner to repair, prepare and recoat systems not conforming to Contract Document provisions.

3.12 CLEANING

- A. As Work proceeds, promptly remove spilled and splattered paint and coating products so as not to damage surfaces.
- B. Maintain premises free from unnecessary accumulation of tools, equipment, surplus materials and debris.
- C. At conclusion of work, thoroughly clean paint and coatings from surfaces not designated to be painted.
 - 1. Do not scratch or damage surfaces.
 - 2. Verify chemical compatibility of cleaners to materials to be cleaned.
- D. Leave premises neat and clean; free from debris and residue from work of this Section.
- E. Do not dump paint, stains, chemicals and clean/wash painting equipment anywhere in the landscaping around the building, site or property, including the adjoining property.

3.13 EXTERIOR PAINTING AND COATING SCHEDULE

- A. Exterior Primer for Cedar:
 - 1. Alkyd-Oil Wood Primer:
 - a. Basis-of-design: Benjamin Moore, Fresh Start Premium Exterior Primer, Exterior Wood Primer (094), one (1) coat.
- B. Exterior Finish for Wood Trim:
 - 1. Exterior Two (2)-Coat Acrylic Low Luster/Eggshell Finish (Gloss Level 2):
 - a. Benjamin Moore, Regal Select Exterior High Build, Low Lustre (401), two (2) coats
 - b. Color: Match existing.
- C. Exterior Finish for Fiber Cement Siding and Exterior Trim:
 - 1. Exterior Two (2)-Coat Acrylic Low Luster/Eggshell Finish (Gloss Level 2):
 - a. Benjamin Moore, Regal Select Exterior High Build, Low Lustre (401), two (2) coats
 - b. Color: Match existing.
- D. Exterior Finish for Fiberglass Doors:
 - 1. Exterior Two (2)-Coat Acrylic Semi-Gloss/Soft Gloss (Gloss Level 5):
 - a. Benjamin Moore, Regal Select Exterior High Build, Soft Gloss (403), two (2) coats
 - b. Color: Match existing adjacent siding.

3.14 INTERIOR PAINTING AND COATING SCHEDULE

- A. Interior Wood Primer:
 - 1. Primer for Acrylic Enamel and Alkyd Enamel Finishes:
 - a. Benjamin Moore, Fresh Start enamel Underbody Primer (217)
- B. Interior Finish Coating: Wood:
 - 1. Two (2)-Coat Acrylic Finish:
 - a. Benjamin Moore Regal Select Waterborne Interior. Match finish to existing conditions.

- Walls: Flat or Eggshell.
 Trim: Semi-Gloss.
- 3) Doors: Specified above
- Color: White. b.

PART 1 GENERAL

1.1 SUMMARY

- A. Section includes:
 - 1. Cleaning site of debris, grass, trees, and other plant life in preparation for site earthwork.
 - 2. Protection of existing trees, plantings, features, or structures to remain.

1.2 ENVIRONMENTAL REQUIREMENTS

A. Construct temporary erosion and sediment control systems as shown on the Drawings to protect adjacent properties and water resources from erosion and sedimentation.

1.3 PROJECT CONDITIONS

A. Conditions existing at time of inspection for bidding purposes will be maintained by the Owner as reasonably practical.

1.4 SUBMITTALS

- A. Submit the following:
 - 1. Procedure and operational sequence for review and acceptance by the Owner. Include permits for transport and disposal of debris as required.
 - 2. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - a. Use sufficiently detailed photographs or videotape.
 - b. Include plans and notations to indicate specific wounds and damage conditions of eachtree or other plants designated to remain.
 - 3. Prior to mobilization, submit for reviewa complete site access, staging, and stockpiling plan using a copy of the basic site layout plan. Identify all areas to be used for access, staging, and stockpiling throughout various phases of the construction sequence. Provide a legend or key as appropriate where phasing affects location.
 - 4. Tree, Vegetation, and Soil Protection Plan (TVSPP) implementation plan.
 - a. The contractor shall allow five (5) working days for review of the TVSPP.

1.5 QUALITY ASSURANCE

- A. Maintain at least one copy of the WSDOT Standard Specifications for Road, Bridge, and Municipal Construction, 2022 edition, and project plans and specifications onsite.
- B. Field inspection of Erosion Sediment Control measures will be performed by the Contractor as required by KCHA.
- C. Tests and analysis of aggregate material will be performed in accordance with ANSI/ASTM D1557, ASTM D2922, ASTM D3017, ASTM D4318, and ASTM C136, as applicable.
- D. If tests indicate materials do not meet specified requirements, change material and retest or obtain written approval of the Owner. Costs associated with the retesting of materials will be the responsibility of the Contractor.

PART 2 PRODUCTS

- 2.1 CONSTRUCTION FENCING
 - A. Provide galvanized chain link fencing a minimum of 6 feet high around trenching not being worked.

- B. Posts shall be minimum 1 5/8" diameter galvanized steel pipe. At Contractor's option, Schedule 40 galvanized steel pipes may be driven into ground where fencing is placed on pervious and/or uneven surfaces and a continuous roll of fence fabric may be used; use minimum 9-guage aluminum wire ties to attach fabric to posts. On hard surfaces or where fences will be moved frequently, use fence panels supported with concrete blocks (min 80lbs each) and strapped together with saddle clamps. Fence panels shall have top and bottom rails.
- C. Provide interwoven 2" by 2" diamond mesh steel wire fabric, 11-gauge minimum chain link. Knuckled or twisted selvage is acceptable. Barbed wire is not allowed.
- D. Provide prefabricated fence panel gates of an appropriate size and location for Contractor's operations. Gates shall be double-padlocked. Owner will provide 1 lock keyed for City personnel for each entry, and Contractor will provide a lock for Contractor and Subcontractor entry at each gate. Hinged sides of each gate panel shall include double bracketing.
- E. Bracing: Provide additional panels or outriggers as necessary to provide a rigid, stable run of fence.
- F. Provide warning signage every 50lf. of fence running line. Signage shall be a minimum of 18 inches square, brightly colored, with contrasting lettering as follows: "WARNING CONSTRUCTION KEEP OUT."
- G. Where approved, Temporary PVC Fencing may be used in low-security, short term applications. Provide 4-ft wide rolls of orange PVC web fencing, 6-ft lengths of #5 deformed steel reinforcing bar for posts, and safety caps for the #5 reinforcing bar.

2.2 TEMPORARY TREE PROTECTION FENCING

- A. Temporary tree protection fencing shall be comprised of the following:
 - 1. Fencing:
 - a. Chain link fence materials including footings, posts, braces, and mesh to be used to form a 6-foot-high enclosure.
 - b. Posts: 1-1/2 inch steel pipe, minimum. Use with approval by the Owner in areas where fence must cross existing paved surface or as indicated on the Contract Documents.
 - c. Mesh: 2 inch by 2 inch, 11 gauge chain link fabric, minimum.

2.3 ARBORIST WOOD CHIP MULCH

- A. Arborist Wood Chip Mulch (AWCM) shall be coarse ground wood chips (approximately 1/2" to 6" along the longest dimension) derived from the mechanical grinding or shredding of the above-ground portions of trees. It may contain wood, wood fiber, bark, branches, and leaves, but may not contain visible amounts of soil. It shall be free of weeds and weed seeds Including but not limited to plants on the King County Noxious Weed list available at: www.kingcounty.gov/weeds, and shall be free of invasive plant portions capable of re-sprouting, including but not limited to horsetail, ivy, clematis, knotweed, etc. It may not contain more than 1/2% by weight of manufactured inert material (plastic, concrete, ceramics, metal, etc.).
- B. Arborist Wood Chip Mulch, when tested, shall meet the following loose volume gradation:

	Percent Passing		
Sieve Size	Minimum	Maximum	
2"	95	100	
1"	70	100	
5/8"	0	50	
No. 4	0	30	

- C. At the Owner's request, prior to delivery, the Contractor shall provide the following:
 - 1. The source of the product and species of trees included in it.
 - 2. A sieve analysis verifying the product meets the above size gradation requirement.
 - 3. A 5-gallon sample of the product, for the Owner's approval.
- D. The Owner may specify the following chipped woody materials, meeting the above size gradation, weed-free, and inert material requirements, as acceptable substitutes for Arborist Wood Chip Mulch:
 - 1. Chips derived from composting operation screening ("overs").
 - 2. Chips derived from whole tree grinding ("hog fuel").
 - 3. Chips derived from recycling of clean dimensional lumber (e.g., pallets or framing lumber); that has passed through a metal removal process to meet the 1/2% manufactured inert standard above.

PART 3 EXECUTION

3.1 PREPARATION

- A. Identify existing plant life that is to remain and verify that clearing limits are clearly tagged, identified, and marked in such manner as to ensure their protection throughout construction operations.
- B. Provide, erect, and maintain barricades, coverings, or other types of protection to prevent damage to existing improvements.
- C. Contact all necessary utility purveyors including the AHJ to coordinate utility shutoffs.
- D. Do not shut off utilities without prior notice. Site utilities shall remain in service unless otherwise directed.
- E. The Contractor shall verify the locations of existing utilities and discover possible additional utilities not shown so as to avoid damage or disturbance. The underground utility location service shall be contacted for field location prior to any construction. The Owner shall be contacted if a utility conflict exists.
- F. Provide temporary erosion and sedimentation control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to requirements of the AHJ.
- G. Protect from weather existing soils exposed by site clearing and demolition activities. Protect exposed soils from erosion by covering with straw mulch or plastic. Prevent disturbance from vehicular traffic. Coordinate with TESC requirements.
- H. The Contractor shall provide temporary barricades, barriers, guard railing, shoring, etc.as necessary to protect personnel, structures, and utilities to remain intact during the operation of this contract. Conduct work in such a way to prevent damage to adjacent buildings, structures, other facilities, and injury to persons.

3.2 PROTECTION

- A. Locate, identify, and protect existing utilities that are to remain.
- B. Protect trees, plant growth, and features designated to remain as part of final landscaping.
- C. Conduct operations with minimum interference to public or private accesses and facilities. Maintain ingress and egress at all times and clean or sweep roadways daily as required by TESC Plans or governing authority. Dust control shall be provided with sprinkling systems or equipment provided by Contractor.
- D. Protect benchmarks, property corners, and other survey monuments from damage or displacement. If marker needs to be removed it shall be referenced by a licensed land surveyor and replaced, as necessary, in kind.

- E. Provide traffic control as required, in accordance with the US Department of Transportation's "Manual on Uniform Traffic Control Devices" and applicable state highway department requirements.
- F. Maintain a separate drawing to be stored on-site for identifying key utilities and controls. Identify and applycolor-coded markings identifying shut-offs for domestic water, irrigation water, power, and gas. Identify sanitary sewerage, storm water discharge, gas, fiber optics, and telephone (all as appropriate) lines, which are to be maintained in service during the work. Color-code emergency contact information for each utility directly on the drawing.

3.3 TREE, VEGETATION, AND SOIL PROTECTION PLAN

- A. The Contractor shall implement, maintain, and regularly update the Project Site specific TVSPP including all materials, equipment, and labor to be used, for the duration of the Contract. The TVSPP in the Contract Documents shows the expected location of BMPs related to the protection of existing (not designated for removal) and new, trees (including roots), vegetation, and soil. The Contractor shall update the TVSPP as necessary throughout construction.
- B. Locations of "specific protective measures" to ensure preservation of trees, vegetation, and soil within the tree dripline or within the defined areas are required for the following:
 - 1. All areas identified as "Do Not Disturb" by the Construction Drawings and at locations identified by the Owner at the time of field review of the TVSPP implementation plan.
 - 2. Trees identified by the note "Save and Protect Ex Tree to Remain" on the Drawings, or ifnot identified on the Drawings, all trees with work within the dripline the tree; and at locations identified by the Owner at the time of field review of the TVSPP implementationplan.
 - 3. Vegetation identified by the note "Protect Landscaping", "Protect Vegetation" "Protect Shrub", etc. on the Drawings, or if not identified on the Drawings, all vegetation at locations identified by the Owner at the time of field review of the TVSPP implementation plan.
 - 4. Roots identified by the note "Protect Roots" on the Drawings, or if not identified on the Drawings, all roots visible or obvious within the dripline of a tree; and at locations identified by the Owner at the time of field review of the TVSPP implementation plan.
 - 5. Roots within the dripline of a tree encountered during excavation except when within roadway surfacing section, driveway surfacing section, sidewalk surfacing section, utility prisms, and within 1-foot of improvement structures geometrics (such as retaining walls, bridge abutments, pole foundations, etc.). A utility prism is the volume centered about the utility equal to the trench width in both vertical and horizontal dimensions. Utility prisms are not defined for conduit.
 - 6. Other areas to be protected as determined by the Contractor and shown in the Contractor's TVSPP implementation plan.
- C. The TVSPP implementation plan shall address the following "specific protective measures" unless otherwise approved by the Owner and City inspector in writing:
 - If the duration of construction operations at the affected location is less than or equal to 30 Calendar Days, a four (4) foot-six (6)-inch high PVC pipe frame with orange safety fencing attached on all sides shall be used around the perimeter unless otherwise approved per the City inspector. If duration of construction operations at the affected location is greater than 30 Calendar Days, a four (4)-foot- six (6)-inch to six (6)-foot high chain link fence shall be used about the perimeter unless otherwise approved per the City inspector.
 - 2. Apply a 6-inch layer of Arborist Wood Chip Mulch (AWCM) to retain moisture, control erosion and protect surface roots.
 - 3. Apply AWCM and/or burlap watered daily to ensure constant hydration of roots during period of exposure.
 - 4. Apply a minimum 1" steel plate or 4" thick timber planking over 2-3" of AWCM, or minimum ³/₄" plywood over 6 to 8 inches of AWCM, to protect surface or exposed roots from compaction related to construction operations. Only required where construction operations require encroachment onto unpaved surfaces. Unpaved surfaces exclude temporally unpaved surfaces such as the subgrade for prescribed work where compaction is required.
 - 5. The TVSPP implementation plan shall address the method of exploratory excavation to expose roots within specified locations (i.e., by air spade, hand digging, etc.), by which all roots 2" and

larger shall be retained and protected if encountered. Where roots 2-inch diameter and larger are discovered, the Contractor shall promptly notify the Owner.

- 6. No storage of equipment or material shall be allowed within the dripline of a tree unless "specific protective measures" per the TVSPP implementation plan approved by the Owner and City inspector are in place.
- D. The TVSPP implementation plan shall also address the following general protective measures unless otherwise approved by the Owner and City inspector in writing:
 - 1. If canopy/clearance pruning is required, to achieve up to "standard vertical clearances" the Contractor shall notify the Owner at least fifteen (15) working days in advance to allow pruning by the Owner (on-site trees) or City (right of way trees). "Standard vertical clearances" shall be considered 14-feet for roadway, 10-feet for bicycle paths, 8-feet for sidewalks, and as specified in the Contract.
 - 2. Where pruning of canopy for construction clearance above "standard vertical clearances" is not allowed; temporary tie-up of low limbs or alternative construction methods shall be used.
 - 3. Where canopy/clearance pruning above "standard vertical clearances" is approved by the Owner, the Contractor shall be responsible for this pruning and all associated costs.
 - 4. If the Contractor performs canopy/clearance pruning, the Contractor shall provide credentials confirming current ISA certification of pruning technician and/or current certification of a tree care company performing the work. See Authority having Jurisdiction's specifications for pruning requirements. A canopy/clearance plan including credentials or certification may be submitted separate from the TVSPP implementation plan. A separate "TVSPP-canopy/clearance pruning" submittal shall be sent at least five (5) working days in advance. If pruning is performed at both the Owner's and Contractor's cost as described here, the cost will be prorated.
 - 5. Where construction activity involves the operation of equipment or redirection of traffic from established travel lanes within the dripline of tree, the Contractor shall depict these conditions on the TVSPP implementation plan.
 - 6. The removal of all protective measures installed over grass or groundcover and underlying soil proposed to be retained in an undisturbed condition in unpaved planting strips or open areas shall be completed in a timely manner to minimize impact to understory vegetation.
 - 7. Soil management/protective measures shall include eradication of ivy and other invasive weed species detrimental to the preservation of trees, prior to placement of AWCM in all areas to be protected from disturbance.
 - 8. Excavation or tunneling of any kind within the "Critical Root Zone" of a tree requires approval by the Owner and City inspector. The Contractor shall provide at least two (2) working days.
 - 9. Advance written notice for review and shall not proceed without approval from the Owner and City inspector.
 - 10. Excavation or portions thereof excluded from "specific protective measures" but within the dripline of a tree shall be performed with care to minimize damage to roots. In all excavations, if roots 2" and larger are encountered, the excavation at the root location shall stop and the Contractor shall promptly notify the Owner.
 - 11. Trees shall be protected from exhaust heat; exhaust deflection panels may be required on some equipment to prevent burning of foliage and branches of trees to be retained.
- E. Alteration of the TVSPP and protection measures shall be allowed only as deemed necessary by the Owner and/or City inspector.
- F. The Contractor's schedule for installation of protective measures shall be shown in the Contractor's Critical Path Schedule and applicable weekly look-ahead schedules. The Owner's review of the TVSPP implementation plan shall involve a joint field review. Conflicts between protection measures and Work required under the Contract shall be brought to the attention of the Owner during the joint field review of TVSPP implementation plan. The TVSPP implementation plan shall be accepted prior to any mobilization.

3.4 EQUIPMENT

- A. Material shall be transported to and from the project site using well-maintained and operating vehicles. Transporting vehicles operating on site shall stay on designated haul roads and shall not endanger improvements by rutting, overloading, or pumping.
- B. Unless otherwise indicated on Construction Drawings, remove trees, shrubs, grass, other vegetation, improvements, or obstructions interfering with installation of new construction. Removal includes digging out stumps and roots. Depressions caused by clearing and grubbing operations shall be filled to subgrade elevation to avoid ponding of water. Satisfactory fill material shall be placed in accordance with Section 312000 Earth Moving.
- C. Remove grass, trees, plant life, stumps, and other construction debris from site to dump site that is suitable for handling such material according to state laws and regulations.
- D. Cut heavy growths of grass from areas before stripping and topsoil removal and remove cuttings with remainder of cleared vegetative material.

3.5 CLEARING

- A. Specifically locate and establish clearing limits by physical means.
- B. Remove growth and underbrush within the property boundaries as required for new construction and as indicated. Perform removal operations in a manner to protect existing property, trees, and plants to remain.
- C. Save and protect trees indicated on plans to remain. Protect all off-site trees along adjacentroadways and on surrounding properties.
- D. Fill depressions caused by clearing and grubbing operations with appropriate fill material unless further excavation or earthwork is indicated.
- E. Dispose of clearing debris off site in a legal manner. Remove all debris and litter found onsite.

3.6 SITE REMOVALS GENERAL

- A. Remove and dispose of landscaping, topsoil, and other obstructions in areas to be cleared. Materials not designated for salvage shall be broken up, loaded, and legally disposed of by the Contractor. Care shall be taken removing items to ensure that damage does not occur to the existing trees and improvements which are to remain in place.
- B. Sprinkle excavated material and access roads as necessaryto limit dust to the lowest practicable level. Do not use water to such an extent as to cause flooding, contaminated runoff, or icing.

3.7 DISPOSAL OF MATERIALS

- A. The Contractor, in a manner consistent with all government regulations, shall dispose of the refuse resulting from demolition. In no case shall refuse material be left on the project site or be buried in embankments or trenches on the project site. All effort shall be made to recycle materials whenever possible.
- B. Maintain hauling routes clean and free of any debris resulting from work of this Section.
- C. The Contractor shall submit to the Owner copies of trip tickets and receiver tickets for all material transported to approved landfills and/or recyclers.

3.8 CONSTRUCTION FENCING

A. Contractor shall install construction fencing including gates as necessary to secure site. Fence shall be inspected and maintained on a regular basis. Secure the project site from trespass or unintentional entrance by unauthorized personnel.

- B. Contractor may work outside construction fence and/or provide additional construction fencing as required to construct improvements.
- C. All disturbed ground stockpiles, staging and on-site transport routes shall be fully enclosed by a perimeter security fence. Areas either under construction or completed but not specifically accepted by the Owner as Substantially Complete shall be completely enclosed. Areas included in the Contract but not yet under construction may be left open to public access at the discretion of the Owner.
- D. Temporary chain link fence panels shall be connected mechanically by means of prefabricated, bolted brackets manufactured specifically for the purpose. Fence panels shall not be wired together.
- E. Where long straight runs result in an unstable condition, sufficient out-rigging shall be incorporated to maintain fencing upright. Use only pre-manufactured outriggers or additional fence panels. Out-riggers shall be placed on the interior side of the fence unless approved by the Owner. Alternatively, and where appropriate, a "zig-zag" arrangement of panels for stability may be used.
- F. Uneven Terrain: Where uneven terrain will not allow the use of pre-manufactured portable fence panels, or where otherwise directed by the Owner, drive posts directly into the earth plumb and 8 ft. on center along the approved alignment. It is the Contractor's responsibility to perform a complete locates for underground utilities in any area to receive driven posts. Drive posts to sufficient depth to assure stability and durability for the life of the installation, maintaining a minimum of 6 ft. above grade. Reset loose posts at the direction of the Owner. Secure chain link fabric to posts using approved wire ties within 6 inches of the top and bottom of each post, and a minimum of 18 inches on center between. Provide posts at each end of each driven post installation at a point that is sufficiently level to clamp prefabricated portable fence panels directly to the driven post installation.
- G. Where approved, temporary PVC Fencing may be installed in low-security, short term applications. Attach 4-ft wide rolls of orange PVC web fencing with wire ties to driven 6-ft #5 deformed steel reinforcing bar posts located at 5 ft. on center. Cap each reinforcing bar with a safety cap manufactured for the #5 reinforcing bar.

3.9 TREE AND PLANT PROTECTION

- A. Installation:
 - 1. Prior to any construction activity the Contractor shall install tree protection fencing in areas adjacent to work.
- B. Repair and Replacement:
 - 1. Trees not ordered or designated to be removed but that are destroyed or irreparably damaged by Contractor's operations as determined by the Owner, shall be repaired or replaced by the Contractor in accordance with the Owner's recommendations (at least 2 replacement trees for every 1 tree removed). Damaged or destroyed trees which cannot be replaced, shall be paid for at the rate of \$50.00 per square inch of cross-sectional area of the trunk, measured 3 feet above existing grade, for trees up to and including 6-inch caliper, and at the rate of \$100.00 per square inch of cross-sectional area for trees in caliper size. This amount shall be credited to the Owner.
 - a. Replacements shall be of the same species and as nearly as possible of the same size as the trees to be replaced (minimum of 2" caliper).
- C. If required, trimming or pruning of tree branches shall be executed by a qualified Arborist. Do not prune unless approved and directed by the Owner.

3.10 ARBORIST WOOD CHIP MULCH

A. Wood chip mulch erosion control application shall be with a forced air mulch spreader, or by a delivery method that does not disturb the surface to be protected, and provide a 2-inch minimum thickness coverage. Where a forced air equipment mulch application is indicated as providing unacceptable results, the Contractor shall employ manual or other application methods such as hand spreading and raking.

B. Should the wood chip mulch coverage expose at any time bare ground of more than 50% in any 100 square foot area, then the Contractor shall promptly re-mulch the exposed area to full coverage of the thickness required

3.11 REMOVAL OF TREE PROTECTION AND SECURITY FENCING

A. Remove Temporary Tree Protection and Security Fencing within 2 weeks of establishment of the Contract Work as Substantially Complete. The Owner reserves the right of transfer of any rental agreement or contract for Temporary Fence installations, with the cost of eventual removal to be borne by the Contractor upon transfer.

3.12 PROTECTION OF STOCKPILES

- A. Protect stockpile areas from release of sediment. Cover stockpiles at all times while not in use to keep stored material dry. Surround materials stockpiled on pavement by temporary silt dikes or filter fence.
- B. The Contractor shall clean adjacent structures and improvements of dust, dirt or debris caused by demolition and clearing operations. Any damage to existing facilities to remain or to improvements on adjacent properties shall be repaired, replaced and/or reconstructed by the Contractor at their expense to its original condition or better as directed by the Owner.
- C. Conduct site demolition and clearing in such a way to ensure minimum interference with roads and other adjacent properties. Do not close or obstruct streets or other occupied or used facilities without permission from authorities having jurisdiction.

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Excavation, filling, and backfilling for pavement.
 - 2. Trenching and backfilling for utilities.
 - 3. Dewatering.

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
- B. ASTM International
 - 1. ASTM D422- Particle Size Analysis of Soil.
 - ASTM D698 Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ftlbf/ft³ (600kN.m/m³)).
 - ASTM D1557 Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ftlbf/ft3 (2,700 Kn.m/m3)).
 - 4. ASTM D2487 Classification of Soils for Engineering Purposes (Unified Soil Classification System).
 - 5. ASTM D2488 Description and Identification of Soils (Visual-Manual Procedures).
 - 6. ASTM D4318 Liquid Limit, Plastic Limit, and Plasticity Index of Soils.
 - 7. ASTM D6938 In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth).
- C. American Association of State Highway and Transportation Officials (AASHTO)
 - 1. AASHTO T 88 Particle Size Analysis of Soils.
- D. Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction, 2022 or latest edition.
- E. City of Auburn Engineering and Construction Standards, 2022 or latest edition.

1.3 **DEFINITIONS**

- A. Satisfactory Materials: ASTM D2487 soil classification groups GW, GP, GM, SW, SP, SM, ML or a combination of these group symbols.
 - 1. Fill materials shall be non-plastic and non-liquid with the paving areas.
 - 2. Satisfactory materials shall be free of rock or gravel large than 6 inches as specified hereafter.
 - 3. Satisfactory materials include Gravel Base per WSDOT Standard Specification 9-03.10, Crushed Surfacing Base Course per WSDOT Standard Specification Section 9-03.9(3), and Crushed Surfacing Top Course per WSDOT Standard Specification Section 9-03.9(3) with the added condition that the percent passing the No. 200 sieve shall not be more than 5 percent during wet weather.
 - 4. Satisfactory materials shall contain no debris, waste, frozen materials, vegetation, and other deleterious matter.
- B. Unsatisfactory Materials: Materials which do not comply with the requirements of satisfactory materials are unsatisfactory.
 - 1. Unsatisfactory materials also include man-made fills; trash; refuse; backfills from previous construction and materials classified as satisfactory materials which contain root and other organic material or frozen materials.
 - 2. Unsatisfactory materials also include satisfactory materials not maintained within 2 percent of optimum moisture content at time of compaction.
- C. Final Subgrade: The horizontal compacted surface of the bottom of the base course of the asphalt and concrete paving and appurtenant structures.

1.4 SUBMITTALS

- A. Submit name of each material supplier and specific type and source of each material. Change in source through project requires approval of Owner.
- B. Submit results of laboratory testing of laboratory testing of materials to Engineer of Record.

PART 2 - PRODUCTS

2.1 FILL MATERIALS

- A. Imported Fill Material: Satisfactory Materials provided form off-site borrow areas when sufficient satisfactory materials are not available from required excavations.
- B. Granular Fill Materials: Sand, sand and gravel or well crushed rock with a maximum particle size of 6 inches and no more than 5 percent passing the No. 200 sieve based on the fraction passing the ³/₄ inch sieve. The fines shall be non-plastic.
- C. Structural Fill: Material meeting the requirements of Satisfactory Materials placed and compacted in accordance with this section.
- D. Crushed Surfacing Top Course for Paving: Material meeting the requirements of WSDOT Standard Specification Section 9-03.9(3) Crushed Surfacing Top Course.
- E. Crushed Surfacing Base Course for Paving: Material meeting the requirements of WSDOT Standard Specification Section 9-03.9(3) Crushed Surfacing Base Course.
- F. Aggregate for Gravel Base: Material meeting the requirements of WSDOT Standard Specification Section 9-03.10 Aggregate for Gravel Base.
- G. Pipe Bedding: Gravel Backfill for Pipe Zone Bedding per Section 9-03.12(3) of the WSDOT Standard Specifications, latest edition.

2.2 EQUIPMENT

A. Transport off-site materials to project using well-maintained and operating vehicles. Once on site, transporting materials shall stay on designated haul routes and shall at no time endanger improvements by rutting, overloading, or pumping.

2.3 SOURCE QUALITY CONTROL

- A. The following tests shall be performed on each type on on-site or imported material used as compacted fill:
 - 1. Moisture and Density Relationship: ASTM D1557
 - 2. Mechanical Analysis: AASHO T88 or ASTM D422
 - 3. Plasticity Index: ASTMD4318
 - 4. Organic Content: ASTMD2974

PART 3 - EXECUTION

3.1 PREPARATION

- A. Identify required lines, levels, contours, datum, elevations, and grades necessary for construction as shown on the drawings.
- B. Protect existing structures, fences, pavement, utilities, and lighting unless otherwise noted on the drawings from excavating equipment and vehicular traffic.
- C. Protect benchmarks, property corners, and other survey monuments from damage or displacement. If marker needs to be removed it shall be referenced by a licensed land surveyor and replaced, as necessary, by same.
- D. Remove from site, material encountered in grading operation that is unsatisfactory material or undesirable for backfilling subgrade, or foundation purposes. Dispose of in a manner satisfactory to the Owner and local governing agencies. Backfill areas with layers of satisfactory material and compact as specified herein.
- E. Locate and identify existing utilities and drainage systems that are to remain and protect from damage.

- F. Verify location, size, elevation and other pertinent data required to make connection to exiting utilities and drainage systems.
- G. Over excavate and properly prepare areas of subgrade that are not capable of supporting proposed systems. Stabilize these areas using aggregate material placed and compacted as specified herein.

3.2 GENERAL EXCAVATION

- A. Classification of Excavation: The Contractor shall assure himself by site investigation or other necessary means that he is familiar with the type, quantity, quality and character of excavation work to be performed. Excavation shall be considered unclassified excavation, except as indicated in the Contract Documents.
- B. When performing grading operations during period of wet weather, provide adequate dewatering, drainage and groundwater management to control moisture of soils.
- C. Shore, brace, and drain excavations as necessary to maintain excavation as safe, secure, and free of water at all times.
- D. Excavate building areas to line and grade as shown on the Construction Drawings being careful not to over excavate beyond elevations needed for building subgrades.
- E. Place satisfactory excavated material into project fillareas.
- F. Unsatisfactory excavated material shall be disposed of in a manner and location that is acceptable to Owner and local governing agencies.
- G. Perform excavation using capable, well-maintained equipment and methods acceptable to Owner and local governing agencies.

3.3 SUBGRADE PREPARATION

A. Proofrolling: Subgrades shall be proofrolled to detect areas of insufficient stiffness or compaction. Proofrolling shall be accomplished by making minimum of 2 complete passes with fully-loaded tandem-axle dump truck with a minimum weight of 20 tons, or approved equal, in each of 2 perpendicular directions while under the supervision and direction of the Construction Testing Laboratory. Limit vehicle speed to 3 mph. Areas of failure such as soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the CTL, shall be excavated and recompacted as specified herein. Continual failure areas shall be stabilized at no additional cost to Owner. Subgrade exposed longer than 48 hours or on which precipitation has occurred shall be re-proofrolled.

3.4 FILLING

- A. Fill areas to contours and elevations shown on the Drawings with materials deemed satisfactory.
- B. Place fills in continuous lifts specified herein.
- C. Fill within proposed paving subgrade shall not contain rock or stone greater than 6 inches in any dimension.
- D. Unless otherwise specified for rock fill, rock or stone less than 6-inches in largest dimension may be used in fill below structures and paving, up to 24 inches below surface of proposed subgrade or finish grade of graded areas when mixed with satisfactory material. Rock or stone less than 2 inches in largest dimension may be used in fill within the upper 24 inches of proposed subgrade or finish grade of graded areas when mixed with satisfactory material.
- E. Fill materials used in preparation of subgrade shall be placed in lifts or layers not to exceed 8 inches of loose measure and compacted as specified hereinafter.

3.5 COMPACTION

- A. Compaction shall be as follows:
 - 1. Subgrade & Fill below Pavement 95% of Maximum Laboratory Density per ASTMD1557.
- B. Maintain moisture content of not less than 2 percent below and not more than 2 percent above optimum moisture content of fill materials to attain required compaction density.

- C. Exercise proper caution when compacting immediately over top of pipes or conduits. Water jetting or flooding is not permitted as method of compaction.
- D. Corrective Measures for Non-Complying Compaction: Remove and re-compact deficient areas until proper compaction is obtained.

3.6 MAINTENANCE OF SUBGRADE

- A. Verify finished subgrades to ensure proper elevation and conditions for construction above subgrade.
- B. Protect subgrade from excessive wheel loading during construction, including concrete trucks, dump trucks, and other construction equipment.
- C. Remove areas of finished subgrade found to have insufficient compaction density to depth necessary and replace in manner that will comply with compaction requirements. Surface of subgrade after compaction shall be firm, uniform, smooth, stable, and true to grade and cross-section.

3.7 BORROW AND SPOIL SITES

A. Comply with state and local permitting requirements for any and all on-site and off-site disturbed spoil and borrow areas. Upon completion of spoil or borrow operations, clean up spoil or borrow areas in a neat and reasonable manner to the satisfaction of Owner or off-site property owner, if applicable.

3.8 FINISH GRADING

A. Check grading of building subgrade by string line from grade stakes (blue tops) set at not more than 50-foot centers. Allowable tolerance shall be plus or minus 0.10 feet from plan grade. Provide engineering and field staking as necessary for verification of lines, grades, and elevations.

3.9 QUALITY CONTROL TESTING AND INSPECTION

- A. The contractor shall perform quality testing and inspections as considered necessary.
- B. Report of testing and inspection results shall be made upon completion of testing.
- C. Classification of Materials: Perform test for classification of materials used and encountered during construction in accordance with ASTM D2488 and ASTM D2487.
- D. Laboratory Testing Of Materials: Perform laboratory testing of materials (Proctor, Sieve Analysis, Atterberg Limits, Consolidation Test, Organic Content, etc.) as specified.
- E. Proofrolling: Document and explain proofrolling inspection procedures and results in the laboratory inspection report.
- F. Field Density Test:
 - 1. Paving Areas: in cut areas, not less than 1 compaction test for every 10,000 square feet. In fill areas, same rate of testing for each 8-inch lift, measured loose.
 - 2. Test Method: In-place nuclear density, ASTM D6938.
 - 3. Density tests on top of paving subgrade shall be performed within 48 hours prior to placement of overlying materials. If inclement weather occurs after testing, retest prior to placement of overlying materials.
- G. Observation and Inspection
 - 1. Observe all subgrades/excavation bases below footings and slabs and verify design bearing capacity is achieved as required.
 - 2. Observe and document presence of groundwater within excavations.

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. This section includes erosion and sedimentation control measures.
- 1.2 ENVIRONMENTAL REQUIREMENTS
 - A. Protect adjacent properties, and any identified endangered or threatened species or critical habitat, any identify cultural or historic resources, and receiving water from erosion and sedimentation damage until final stabilization.
- 1.3 PROJECT CONDITIONS
 - A. Conditions existing at time of inspection for bidding purposes will be maintained by the Owner as reasonably practical.

PART 2 - PRODUCTS

- 2.1 MATERIALS
 - A. Sediment control devices as specified on the Drawings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Review the Construction Drawings and Temporary Erosion and Sedimentation Control (TESC) Plan.
- B. Revise TESC plan as necessary to address potential pollution from site identified after issuance of TESC plan at no additional cost to Owner.
- C. Conduct pre-construction meeting with Site Contractor, all ground disturbing sub-contractors, Engineer of Record or someone from their office familiar with the site and Temporary Erosion and Sedimentation Control Plan, and Owner.

3.2 IMPLEMENTATION

- A. Place erosion and sediment control systems in accordance with the Construction Drawings and as may be dictated by site conditions in order to maintain the intent of the specifications and permits. All BMPs shall comply with the requirements of the City of Auburn.
- B. Deficiencies or changes on the erosion control drawings shall be corrected or implemented as site conditions change. Changes during construction shall be noted and posted on the drawings.
- C. Maintain temporary erosion and sedimentation control systems as dictated by site conditions, indicated in the construction documents.
- D. Contractor shall incorporate permanent erosion features and paving at the earliest practical time to minimize need for temporary controls.
- E. Make any and all changes to erosion control BMPs when directed to do so by the City of Auburn Inspector.

PART 1 GENERAL

1.1 SUMMARY

- A. This section includes:
 - 1. Asphalt concrete binder and surface course.

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
- B. The Asphalt Institute (AI):
 - 1. MS-2 Mix Design Methods for Asphalt Concrete And Other Hot-Mix Types.
- C. Washington State Department of Transportation Standard Specifications for Road, Bridge, and Municipal Construction, 2022 or latest edition.
- D. City of Auburn Engineering and Construction Standards, latest edition.
- E. ASTM International (ASTM):
 - 1. ASTM D1188 Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Coated Samples.
 - 2. ASTM D2041 Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures.
 - 3. ASTM D2950 Density of Bituminous Concrete in Place by the Nuclear Methods.
 - 4. ASTM D2726 Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixture.
 - 5. ASTM D5444 Mechanical Size Analysis of Extracted Aggregate.
- F. American Association of State Highway and Transportation Officials (AASHTO):
 - 1. AASHTO M017 Mineral Filler for Bituminous Paving Mixtures
 - 2. AASHTO M140 Emulsified Asphalt
 - 3. AASHTO M208 Cationic Emulsified Asphalt
 - 4. AASHTO M320 Performance-Graded Asphalt Binder
 - 5. AASHTO M323 Superpave Volumetric Mix Design
 - 6. AASHTO T164 Quantitative Extraction of Asphalt Binder from Hot-Mix Asphalt (HMA)
 - 7. AASHTO T166 Bulk Specific Gravity of Compacted Hot-Mix Asphalt Mixtures Using Saturated Surface-Dry Specimens
 - 8. AASHTO T209 Theoretical Maximum Specific Gravity and Density of Hot Mix Asphalt (HMA)
 - 9. AASHTO T245 Resistance to Plastic Flow of Bituminous Mixtures Using Marshall Apparatus
 - 10. AASHTO T275 Bulk Specific Gravity of Compacted Hot-Mix Asphalt Mixtures Using Parafin-Coated Specimens
 - 11. AASHTO T308 Asphalt Content of Hot-Mix Asphalt (HMA) by the Ignition Method
 - 12. AASHTO T312 Preparing and Determining the Density of Hot-Mix Asphalt (HMA) Specimens by Means of the Superpave Gyratory Compactor
 - 13. AASHTO T331 Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Automatic Vacuum Sealing Method
- G. National Asphalt Pavement Association (NAPA):
 - 1. IS 128 HMA Pavement Mix Type Selection Guide

1.3 QUALITY ASSURANCE

A. Contractor shall be responsible for testing of in-place asphalt concrete courses for compliance with requirements for thickness, compaction, and surface smoothness.

- B. Pre-Installation Meeting: Convene a pre-installation meeting at the site at least two weeks prior to commencing work of this section. Require attendance of parties directly affecting work of this Section, including, but not limited to Owner's Representative, Engineer of Record, Inspector, Contractor, and paving sub-contractor.
 - 1. Contact Owner at least one week prior to pre-installation conference to confirm schedule.
 - 2. Record discussions of meeting and decisions and agreements (or disagreements) reached, and furnish copy of record to each party attending. Review foreseeable methods and procedures related to paving work, including the following:
 - a. Review preparation and installation procedures and coordinating and scheduling required with related work.
 - b. Review proposed sources of paving materials, including capabilities and location of plant that will manufacture hot-mix asphalt.
 - c. Tour, inspect and discuss condition of subgrade, drainage structures, and other preparatory work.
 - d. Review requirements for protecting paving work, including restriction of traffic during installation period and for remainder of construction period.
 - e. Review and finalize construction schedule and verify availability of materials, installer's personnel, equipment, and facilities needed to make progress and avoid delays.
 - f. Review paving requirements (drawings, specifications and other contract documents).
 - g. Review required submittals, both completed and yet to be completed.
 - h. Review required inspections, testing procedures.
 - i. Review weather and forecasted weather conditions, and procedures for coping with unfavorable conditions.
 - j. Review safety precautions relating to placement of paving.

1.4 SUBMITTALS

- A. Submit mix designs to the Engineer of Record at least 2 weeks prior to beginning asphalt paving operations. Mix designs over one year old will not be accepted. Mix design submittal shall follow the format as recommended by Asphalt Institutes Manual MS-2 and include the following:
 - 1. Type and Name of mix.
 - 2. Gradation Analysis.
 - 3. Optimum asphalt content.
 - 4. Grade of asphalt binder.
 - 5. Volumetric properties.
 - 6. References to WSDOT specification for each material when applicable.

1.5 PROJECT CONDITIONS

- A. Weather Limitations:
 - 1. Apply prime and tack coats when ambient or base surface temperature is above 40 F, and when temperature has been above 35 F for 12 hours immediately prior to application. Do not apply when base is wet, contains excess moisture, during rain, or when frozen.
 - 2. Construct asphalt concrete paving when ambient temperature is above 40 F.
- B. Maintain access for vehicular and pedestrian traffic as required for other construction activities. Utilize temporary striping, flagmen, barricades, warning signs, and warning lights as required.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Aggregate: Shall conform to WSDOT Section 9-03.8.
- B. Asphalt Cement: Shall conform to WSDOT Section 9-02.1(4)

- C. Prime Coat: Medium curing cut-back asphalt or asphalt penetrating prime coat consisting of either MC-30 or SS-1h.
- D. Tack Coat: Emulsified asphalt; AASHTO M140 or AASHTO M208, SS-1h, CSS-1, or CSS-1h, diluted with 1 part water to 1 part emulsified asphalt.
- E. Seal Coat: Shall conform to WSDOT Section 5-02.2.
- F. Mineral Filler: Shall comply with WSDOT Section 9-03.8(5).
- G. Asphalt-Aggregate Mixture: Shall comply with WSDOT Section 9-03.8(6).
- H. Reclaimed Asphalt Pavement (RAP): Use of RAP may be used in amounts not to exceed 10% (by wt.) in surface courses and 20% (by wt.) in binder and base courses. The mix design shall contain the percentage of RAP that is to be used in the production. Higher proportions of RAP may be used upon approval with evidence showing specified quality of mix is retained. Production procedures using RAP material shall conform to NAPA IS 123. Additional RAP provisions shall be as follows:
 - 1. Material-handling machinery shall not drive on the RAP stockpiles.
 - 2. RAP shall be processed in such a manner as to ensure that the maximum top size introduced into the mix shall be 1¹/₂ inches.
 - 3. Dust (fines) in the RAP, when added to the virgin aggregate, shall not exceed the requirements of the virgin mix design.
 - 4. Moisture content shall be monitored to assure that the material can be thoroughly dried as it is processed.
 - 5. Stockpiles shall be left uncovered or stored under the roof of an open-sided building.
 - 6. Material handling front-end loader operators shall be experienced in handing RAP materials.
 - 7. RAP shall be loaded in the cold feed bins in small consistent quantities without causing the material to compact in the bin.
 - 8. RAP shall not be held in the bin for extended periods of time, especially on hot, humid days.
 - 9. During production RAP material shall not be allowed to contact open flame

2.2 EQUIPMENT

- A. Equipment necessary for the paving of asphalt concrete shall be on the project prior to beginning paving operations.
- B. Maintain equipment in satisfactory operating condition and correct breakdowns in manner that will not delay or be detrimental to the schedule of paving operations.

PART 3 EXECUTION

3.1 EXAMINATION

A. Verify that the prepared base material has been inspected, tested, and gradients and elevations are correct, dry and properly prepared.

3.2 PREPARATION

- A. Proof roll prepared base material surface to check for unstable areas in accordance with Section 312000 Earth Moving including documentation and re-proofrolling as required. Paving work shall begin only after unsuitable areas have been corrected and are ready to receivepaving.
- B. Remove loose material from compacted base material surface immediately before applying prime coat.
- C. Establish and maintain required lines and elevations.
- D. Cover the surfaces of curbs, gutters, manholes and other structures on which the asphalt concrete mixture will be placed, with a thin, uniform coat of liquid asphalt. Where the asphalt concrete mixture will be placed against the vertical face of an existing pavement, clean the vertical face to remove foreign substances and apply a coating of liquid asphalt at a rate of approximately 0.25 gallons per square yard.

3.3 APPLICATION

- A. Prime Coat:
 - 1. Apply to base material surfaces at least 24 hours in advance.
 - 2. Apply at a rate of 0.25 0.30 gal per sq. yd. per inch of depth over compacted base material. Apply to penetrate and seal, but not flood surface.
 - 3. Take necessary precautions to protect adjacent areas from over spray.
 - 4. Cure and dry as long as necessary to attain penetration of compacted base and evaporation of volatile substances.
- B. Tack Coat:
 - 1. Apply to contact surfaces of previously constructed asphalt concrete base courses or Portland cement concrete and surfaces abutting or projecting into asphalt concrete or into asphalt concrete pavement.
 - 2. Apply tack coat to asphalt concrete base course or sand asphalt base course. Apply emulsified asphalt tack coat between each lift or layer of full depth asphalt concrete and sand asphalt bases and on surface of bases where asphalt concrete paving will be constructed.
 - 3. Apply at rate which produces a residual of asphalt cement between 0.04 and 0.06 gal per sq. yd. of surface.
 - 4. Allow drying until at proper condition to receive paving.
- C. Seal Coat:
 - 1. Shall be applied in accordance with WSDOT Specification Section 5-02.3(3).

3.4 ASPHALT CONCRETE PLACEMENT

A. Placement shall comply with WSDOT Specification Section 5-04.3(9) except where City of Auburn requirements are more stringent.

3.5 ROLLING AND COMPACTION

A. Rolling and compaction shall comply with WSDOT Section 5-04.3(10) except where City of Auburn requirements are more stringent.

3.6 JOINTS

A. Joints shall comply with WSDOT Section 5-04.3(12) except where City of Auburn requirements are more stringent.

3.7 FIELD QUALITY CONTROL

- A. The Contractor shall perform testing or inspection as considered necessary by the Contractor for assurance of quality control including use of a nuclear density gauge to establish rolling patterns and monitor in-place density.
- B. Coring Frequency: Asphalt surface and base courses shall be randomly cored at minimum rate of 3 cores per day's placement per mix type. Asphalt concrete pavement samples shall be tested for conformance with density and thickness requirements. Cores shall be cut from minimal loading areas representative of project.
- C. Coring holes shall be immediately filled by the Contractor with full depth, hot-mix asphalt concrete or non-shrink grout tinted to match the surrounding pavement.
- D. Testing shall be performed on finished surface of each asphalt concrete course for smoothness, using 10'-0" straightedge applied parallel with, and at right angles to centerline of paved area. The following tolerances in 10 feet shall not be exceeded:
 - 1. Base Course Surface: 1/4 –inch
 - 2. Wearing Course Surface: 1/8-inch.

- E. Thickness Test: The Contractor shall measure pavement thickness behind the paver at the beginning of and during pavement placing operations to assure proper thickness. The CTL will measure thickness of each core sample taken. At each core location, the thickness of the course shall meet or exceed the thickness shown. If the thickness of a lower course of asphalt is less than the thickness shown, it shall be identified as a deviation and recorded. The contractor shall either (1) remove and replace the deficient pavement, or (2) increase the thickness of the upper course so that the total thickness of the pavement meets or exceeds the design thickness (provided that the specified compaction of the lower lift is achieved). If the contractor elects to increase the thickness of the upper course, three additional cores shall be taken in the area after the upper course is laid to verify that the total thickness is achieved
- F. Field density test for in-place materials:
 - 1. Density tests shall be conducted on each core sample taken in accordance with ASTM D1188 or D2726 (AASHTO T166, T275, T331) as applicable.
 - 2. In-place density tests by nuclear method in accordance with ASTM D2950 shall also be taken by the Contractor as necessary to assure the specified density is obtained. Nuclear density shall be correlated with ASTM D1188 or D2726 or AASHTO T166, T275, T331 as applicable.
 - 3. Density tests on courses to be overlaid by subsequent courses shall be performed within 48 hours prior to placement of next lift. If inclement weather occurs after testing, retest prior to placement of next lift.
- G. Volumetric Properties: Obtain test samples from the truck at the asphalt plant. Mixture samples shall be taken at least 2 times for every 8-hour day.
 - 1. Superpave Mix: Compact into specimens in accordance with AASHTO T312. Test each specimen for determination of relative density, VMA, VFA, and dust-to-binder ratio.
 - 2. Marshall Mix: Compact into specimens using compactive blows equal to mix design per side with the Marshall hammer as described in AASHTO T245. Temperature shall be equal to temperature at paving machine with reheating. Test each specimen for determination of laboratory air voids, Marshall stability, and flow.
- H. Check surface areas as necessary to identify ponding areas. Remove and replace unacceptable paving as directed by Owner.
- I. Asphalt Content and Aggregate Gradation: Asphalt content extraction and gradation of extracted aggregate testing shall be performed in accordance with AASHTO T 308 or AASHTO T164 and ASTM D5444 respectively and local State Highway Department Specifications requirements. At least two asphalt content and two gradation tests shall be taken for each 2000 tons or each day pavement is placed.
- J. Areas of deficient paving, including compaction, smoothness, thickness, and asphalt mixture, shall be delineated, removed, and replaced in compliance with specifications requirements. Alternative remedial or corrective measures for repair of deficient paving may be allowed provided a plan of corrective action is submitted in the form of a Request for Information (RFI) and the plan isapproved by the Engineer of Record.
- K. The Contractor shall certify in writing that asphalt placement is in accordance with specification requirements.

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Furnish materials and repair and/or replace painted or thermoplastic parking stall striping, ADA symbols, and other site striping on paved surfaces.
 - 2. Reinstall salvaged parking signs.
 - 3. Reinstall salvaged wheel stops.

1.2 REFERENCES

- A. APAW Designs and Specifications for Asphalt Concrete Pavements and Bases, 1990Edition.
- B. Manual on Uniform Traffic Control Devices (MUTCD) Current Edition.

1.3 SUBMITTALS

A. Submit Pavement Marking paint product information.

1.4 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Use experienced installers.

1.5 PROJECT CONDITIONS

A. Maintain access for vehicular and pedestrian traffic as required for other construction activities. Use barricades and warning lights as required.

PART 2 PRODUCTS

- 2.1 PAINT
 - A. Paint shall be waterborne or solvent borne, colors as shown or specified herein. Pavement marking paints shall comply with applicable state and local laws enacted to ensure compliance with Federal Clean Air Standards. Paint materials shall conform to the restriction of the City of Auburn.
 - B. Paint shall be red, white, yellow or green traffic paint (or compound suitable for paved surfaces) for painting curbs and lane striping conforming to the requirements of the AHJ. Paint shall be lead-free.
 - C. Paint shall be delivered and stored in sealed containers that plainly show the designated name, formulation, or specification numbers, batch number, color, date of manufacture, manufacturer's name, formulation number and directions, all of which shall be printed legibly at time of use. The paint shall be homogeneous, easily stirred to a smooth consistency, and shall show no hard settlement or other objectionable characteristics.

PART 3 EXECUTION

3.1 EXAMINATION

A. Examine the work area and correct conditions detrimental to timely and proper completion of the work. Do no proceed until unsatisfactory conditions are corrected.

3.2 PREPARATION

- A. Sweep and clean surface to eliminate loose material and dust.
- B. Where existing pavement markings are indicated on the Drawings to be removed or would interfere with adhesion of new paint, a motorized abrasive device shall be used to remove the markings. Equipment employed shall not damage existing paving or create surfaces hazardous to vehicle or pedestrian traffic.

3.3 GENERAL

- A. The Contractor shall furnish an experienced technician to supervise the location alignment, layout dimensions and application of pavement markings.
- B. Paint Application
 - 1. Apply pavement marking to clean, dry pavement surfaces and in accordance with manufacturer's recommendations.
 - 2. A minimum of two applications of paint will be required to complete all paint markings.
 - 3. Apply paint evenly to the pavement surface to be coated at the rate of 105, plus or minus 5, square feet per gallon. Apply paint to clean, dry surfaces, and unless otherwise approved, only when air and pavement temperatures are 50 degrees F and rising and less than 95 degrees. Maintain paint temperature within these same limits. Apply paint pneumatically with approved equipment.
 - 4. Provide guide lines and templates as necessary to control paint application. Takespecial precautions in marking letters and symbols.
 - 5. The top of pavement markings shall be smooth and uniform. Line ends shall be square and clean. Sharply outline edges of marking.
 - 6. The maximum drying time requirement of the paint specifications and manufacturer's recommendations shall be strictly enforced, to prevent undue softening of bitumen, and pickup, displacement, or discoloration by tires of traffic.
 - 7. Discontinue painting operations if there is a deficiency in drying of the marking, until cause of the slow drying is determined and corrected.
- C. Paint shall be applied uniformly. All markings shall be protected from traffic until the paint is thoroughly dry. All markings shall present a clean cut, uniform, and workmanlike appearance. All marking which fail to have a uniform, satisfactory appearance shall be corrected by the Contractor at their expense.
- D. Parking Area
 - 1. Parking stall striping shall be 4 inches wide painted white unless noted on the plans. Two applications are required, with thorough drying time between applications.
 - 2. Accessible/ADA Parking Stall Symbol shall be in accordance with the requirements of the Owner.

3.4 SIGNS

A. Salvage existing signs for reinstallation.

3.5 CONCRETE WHEEL STOP

A. Salvage existing concrete wheel stops for reinstallation.

PART 1 - GENERAL

- 1.1 SUMMARY
 - A. This section includes site improvements including benches.

1.2 SUBMITTALS

- A. Product Data: Submit manufacturer's product data and installation instructions for each material and product used.
- B. Shop Drawings: Submit shop drawings indicating material characteristics, details of construction, connections, and relationship with adjacent construction.

1.3 QUALITY ASSURANCE

A. Comply with governing codes and regulations. Provide products of acceptable manufacturers which have been in satisfactory use in similar service for three years. Use experienced installers. Deliver, handle, and store materials in accordance with manufacturer's instructions.

PART 2 - PRODUCTS

- 2.1 MATERIALS
 - A. Bench
 - 1. Manufacturers: FairWeather Site Furnishings or approved equal.
 - a. Basis of Design: Al's Collection Bench Series AL-0100-72 (Recycled Plastic Slatoption).
 - 2. Dimensions: 72" x 31-5/8" x 35-1/4"
 - 3. Seat Height: 16-3/4"
 - 4. Material: Steel with recycled plastic slats.
 - 5. Mounting: Surface mount.
 - 6. Hardware: Stainless steel with powder coated washers.
 - 7. Finish: Shop powder coated.
 - 8. Color: As selected by Owner from Manufacturer's standard colors.

PART 3 - EXECUTION

- 3.1 INSTALLATION
 - A. Install materials and systems in accordance with manufacturer's instructions and approved submittals. Install materials and systems in proper relation with adjacent construction and with uniform appearance. Coordinate with work of other sections.
 - B. Restore damaged finishes and test for proper function. Clean and protect work from damage.

PART 1 GENERAL

1.1 SUMMARY

A. Section includes planting of sod, seed, and associated materials.

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
- B. American National Standards Institute (ANSI):
 - 1. ANSI Z60.1 American Standard for Nursery Stock.
- C. American Nursery and Landscape Associate (ANLA) for both plant size and form.
- D. ASTM International (ASTM):
 - 1. ASTM D5268 Topsoil used for Landscaping Purposes.

1.3 SUBMITTALS

- A. Materials Test Reports: Submit topsoil borrow area test reports to Engineer of Record a minimum 6 weeks prior to delivery to site.
 - 1. Provide location of topsoil borrow area.
 - 2. Provide name of independent soil testing laboratory.
 - 3. Provide date of sampling and testing.
- B. Product Data:
 - 1. Submit certification tags from sod and seed verifying type and purity to Engineer of Record.
- C. Quality Assurance Submittals:
 - 1. Submit to Owner a copy of the invoice for each shipment of plant materials to the Project site. Invoice shall include name and size of each type of plant material.
- D. Closeout Submittals:
 - 1. Submit Meetings and Inspections Log prior to Final Completion of the Project.
 - 2. Certification of Conformance: Provide certificate of satisfactory performance of planting operations signed by the Contractor for attachment to Engineer of Record's Conformance Letter.

1.4 QUALITY ASSURANCE

- A. Pre-Work Meeting: Convene a pre-work meeting minimum 30 days prior to commencing work on this Section. Review conditions of operations, procedures and coordination with related work. The prework meeting may be combined with the plant material selection trip.
 - 1. Review planting schedule and maintenance.
 - 2. Review required inspections, schedule of topsoil testing, and environmental procedures.
- B. Quality Assurance Inspections: Conduct the following inspections during the course of the work in the presence of the Owner and Engineer to verify conformance to specification requirements. Correct noted deficiencies during each inspection prior to proceeding with subsequent work.
 - 1. Substantial Completion Inspection: Convene a substantial completion inspection to observe completed work. Engineer of Record will provide contractor with a list of deficient or incomplete items within 3 calendar days of inspection date.
 - 2. Final Inspection: Within 30 days of substantial completion date, convene a final inspection to observe that all work is completed as specified and shown on the drawings.

3. Warranty Inspections: Convene a warranty inspection 60 calendars days prior to expiration of warranty period specified in Part 3 herein.

1.5 PROJECT CONDITIONS

A. Perform work only during weather conditions favorable to landscape construction and to health and welfare of plants. Owner shall determine suitability of such weather conditions.

PART 2 PRODUCTS

2.1 LAWN SEED

- A. Provide fresh, clean, new crop lawn seed mixture. Furnish to Owner dealers guaranteed statement of composition of mixture and percentage of purity and germination of each variety.
- B. Seed Mixture: Provide seed of grass species and varieties, proportions by weight and minimum percentages of purity, germination, and maximum percentage of weed seed. Seed mixtures shall conform to the Construction Drawings.

2.2 SOD

A. Provide sod species suitable as lawn turf for the region. Sod shall be strongly rooted, weed, disease, pest free and uniform in thickness.

2.3 TOPSOIL

- A. ASTM D5268, natural, friable, fertile, fine loamy soil possessing characteristics of representative topsoil in the vicinity that produces heavy growth. Topsoil shall have a pH range of 5.5 to 7.4 percent, free from subsoil, objectionable weeds, litter, sods, stiff clay, stones larger than 1-inch in diameter, stumps, roots, trash, herbicides, toxic substances, or any other material which may be harmful to plant growth or hinder planting operations. Top soil shall contain a minimum of three percent organic material.
- B. Topsoil shall be tested in accordance with Part 3 below.
- C. Salvaged or Existing Topsoil: Reuse suitable topsoil stockpiled on-site or existing topsoil undisturbed by grading or excavation operations. Clean topsoil of roots, plants, sod, stones, clay lumps, and other extraneous materials harmful to plant growth.
- D. Verify amount of suitable topsoil stockpiled if any, and supply additional imported topsoil as needed.
- E. Imported Topsoil: Supplement salvaged topsoil with imported topsoil from off-site sources when existing quantities are insufficient.
 - 1. Obtain topsoil displaced from naturally well-drained sites where topsoil occurs at least 6 inches deep; do not obtain from agricultural land, bogs, or marshes.
 - 2. Verify borrow and disposal sites are permitted as required by state and local regulations. Obtain written confirmation that permits are current and active.
 - 3. Obtain permits required by state and local regulations for transporting topsoil. Permits shall be current and active.
- F. Amend existing and imported topsoil as indicated in Part 3 below.

2.4 ORGANIC SOIL AMENDMENTS

- A. Manure: Well-rotted, unleached, stable or cattle manure containing not more than 25 percent by volume of straw, sawdust, or other bedding materials; free of toxic substances, stones, sticks, soil, weed seed, and material harmful to plant growth.
- B. Compost: Decomposed organic material including leaf litter, manure, sawdust, plant trimmings and/or hay, mixed with soil.
- C. Biosolids: Use Grade 1 containing lower pathogen levels.
- D. Worm Castings: Earthworms.

2.5 INORGANIC SOIL AMENDMENTS

- A. Lime: ASTM C602, Class O agricultural limestone containing a minimum of 80 percent calcium carbonate equivalent with a minimum of 95 percent passing No. 8 sieve and minimum of 55 percent passing No. 60 sieve.
- B. Sulfur: Granular, biodegradable, containing a minimum of 90 percent sulfur, with a minimum of 99 percent passing No. 6 sieve and a maximum of 10 percent passing No. 40 sieve.
- C. Iron Sulfate: Granulated ferrous sulfate containing a minimum of 20 percent iron and 10 percent sulfur.
- D. Agricultural Gypsum: Finely ground, containing a minimum of 90 percent calcium sulfate.
- E. Sand: Clean, washed, natural or manufactured, free of toxic materials.

2.6 PLANTING ACCESSORIES

A. Pre-Emergent Herbicide: Shall be Snapshot or approved equal applied per manufacturer's recommendations.

2.7 PLANTING SOIL MIX

A. Planting medium containing 75 percent specified topsoil mixed with 15 percent organic soil amendments and 10 percent sharp washed sand.

2.8 FERTILIZER

- A. Slow-Release Fertilizer: Use one of the following:
 - 1. Osmocote Standard Granular fertilizer by Scotts Company composed of 14 percent nitrogen, 14 percent phosphorous, and 14 percent potassium, by weight.
 - 2. Approved equal.
- B. Deliver fertilizer, mixed as specified, in original unopened standard size bags showing weight, analysis and name of manufacturer. Containers shall bear manufacturer's guaranteed statement of analysis, or manufacturer's certificate of compliance covering analysis shall be furnished to Owner. Store fertilizer in such manner that it shall be kept dry.

2.9 MULCH

A. Mulch: Bark mulch shall be derived from Douglas Fir, Pine or Hemlock species. It shall not contain resin, tannin or other compounds detrimental to plant life. Sawdust or wood shavings shall not be used as mulch. Gradation of mulch shall be as shown on the Construction Drawings.

PART 3 EXECUTION

3.1 PREPARATION

- A. If project completion date prohibits in-season planting, prepare for out-of-season seeding or sodding so that lawns shall be completed and ready for acceptance at time of project completion.
- B. Unsuitable Subsoils: Locations containing unsuitable subsoil shall be treated by one or more of the following:
 - Where unsuitability is deemed by Owner to be due to excessive compaction caused by heavy equipment and where natural subsoil is other than AASHTO classification of A6 or A7, loosen such areas with spikes, discing, or other means to loosen soil to condition acceptable to Owner. Loosen soil to minimum depth of 12 inches with additional loosening as required to obtain adequate drainage. Contractor may introduce peat moss, sand, or organic matter into the subsoil to obtain adequate drainage. Such remedial measures shall be considered as incidental, without additional cost to Owner.
 - 2. Where unsuitability is deemed by Owner to be due to presence of boards, mortar, concrete, or other construction materials in sub-grade and where natural subsoil is other than AASHTO classification of A6 or A7, remove debris and objectionable material. Such remedial measures shall be considered as incidental, without additional cost to Owner.
 - 3. Where unsuitability is deemed by Owner to be because natural subsoil falls into AASHTO classification of A6 or A7 and contains moisture in excess of 30 percent, then installation of sub-drainage system or other means described elsewhere in Specifications shall be used. Where such conditions have not been known or revealed prior to planting time and they have not been recognized in preparation of The Drawings and Specifications, then Owner shall issue pricing order to install proper remedial measures.
- C. Unsuitable Topsoil: Locations containing unsuitable topsoil shall be treated by one or more of the following:
 - 1. Where unsuitability is deemed by Owner to be because of presence of objectionable weeds; litter; sods; stiff clay; toxic substances; herbicides or other material which may be harmful to plant growth, then topsoil shall be removed from the site and disposed of in a legal manner.
 - 2. Where unsuitability is deemed by Owner to be because of presence of the stumps, roots; stones larger than 1 inch in diameter; less than 3 percent organic material; low or high pH range, remove objectionable material and amend topsoil to meet the requirements specified in part 2 above. Such remedial measures shall be considered as incidental, without additional cost to Owner.
- D. Perform planting operations at steady rate of work unless weather conditions make it impossible to work. No plant material shall be planted in frozen ground.
- E. Sod and Seed Bed Preparation
 - 1. Newly Graded Subgrades:
 - a. Do not place topsoil until subgrade has been approved in accordance with Section 31 2000.
 - b. Before placing topsoil, rake subsoil surface clear of stones, debris, and roots. Disk, drag, harrow, or hand rake subgrade to depth of 4 inches and remove stones larger than 1-1/2 inches to provide bond for topsoil.
 - c. Spread topsoil to a depth of 4 inches but not less than required to meet finish grades after light rolling and natural settlement. Adjust depth of topsoil in areas adjacent to paved surfaces or curbs to allow for the placement of sod or seed.
 - 2. Unchanged Subgrades: If lawns are to be planted in areas unaltered or undisturbed by excavating, grading, or surface-soil stripping operations, prepare surface as follows:
 - a. Remove existing grass, vegetation, and turf. Do not mix into surface soil.

- b. Disk, drag, or harrow surface soil to a depth of at least 6 inches.
- c. Remove stones larger that 1-1/2 inch in any dimension and sticks, roots, trash, and other extraneous matter.
- d. Legally dispose of waste material, including grass, vegetation, and turf.
- e. Adjust depth of topsoil in areas adjacent to paved surfaces or curbs to allow for the placement of sod or seed.
- 3. Incorporate soil amendments and commercial fertilizer into the top 4 inches of topsoil to achieve the specified topsoil requirements. Till soil to a homogenous mixture of fine texture.
- 4. Grade areas to finish grades, filling as needed or removing surplus topsoil. Float areas to smooth, uniform grade as indicated on the Drawings. Lawn areas shall slope to drain.
- 5. Where no grades are shown, areas shall have a smooth and continual grade between existing or fixed controls, such as walks, curbs, catch basin, steps, or buildings. Roll, scarify, rake, and level as necessary to obtain true, even lawn surfaces. Finish grades shall meet approval of Owner.
- 6. Sod and seed beds shall be firmed by rolling before seeding begins.

3.2 PROTECTION

- A. Topsoil which must be transported across finished sidewalks shall be delivered in such manner that no damage will be done to sidewalks.
- B. Before commencing work, trees and shrubs that are to be saved shall be protected from damage by placement of fencing flagged for visibility or some other suitable protective procedure approved by Owner.
- C. Use precautionary measures when performing work around trees, sidewalks, pavements, utilities, and other features either existing or previously installed.
- D. Adjust depth of earthwork and topsoil when working immediately adjacent to aforementioned features in order to prevent disturbing tree roots, undermining sidewalks and pavements, and damage in general to other features either existing or previously installed.
- E. Where excavation, fill, or grading is required within drip line of trees that are to remain, work shall be performed as follows:
 - 1. Trenching: When trenching occurs around trees to remain, tree roots shall not be cut but trench shall be tunneled under or around roots by careful hand digging without injury to roots.
 - 2. Raising Grades:
 - a. Where fill not exceeding 16 inches is required, clean, washed gravel graded from 1 inch to 2 inches in size shall be placed directly around tree trunk. Extend gravel out from trunk on all sides minimum of 18 inches and finish approximately 2 inches above finished grade at tree. Install gravel before any earth fill is placed. New earth fill shall not be left in contact with trunks of trees requiring fill.
 - b. Where fill exceeding 16 inches is required, construct dry-laid tree well around trunk of tree. Tree well shall extend out from trunk on all sides minimum of 3 feet and to 3 inches above finish grade. Place coarse-graded rock directly around tree well extending out to drip line of tree. Place clean, washed gravel graded from 1 inch to 2 inches in size directly over coarse rock to depth of 3 inches. Place approved backfill material directly over washed gravel to desired finish grade.
 - 3. Lowering Grades: Existing trees in areas where new finish grade is to be lowered shall have regrading work done by hand to elevation indicated on The Drawings. Roots as required shall be cut cleanly 3 inches below finished grade and scars covered with tree paint.
 - 4. Trees marked for preservation that are more than 6 inches above proposed grades shall stand on broad rounded mounds and graded smoothly into lower level. Trees located more than 16 inches above proposed grades shall have dry-laid stone wall or other retaining structure as detailed on The Drawings constructed minimum of 5 feet from trunk. Exposed or broken roots shall be cut clean and covered with topsoil.

3.3 AREAS TO BE TURFED

- A. Unless otherwise shown on the plans, disturbed areas shall be permanently sodded and seeded.
- B. Continually seed remaining disturbed areas until fully turfed with no bare spots.

3.4 SOIL STABILIZATION

- A. Provide one or more of the following techniques to prevent soil eroding from denuded areas and leaving the site. Refer to stabilization requirements in Section 312500 Erosion and Sedimentation Control.
 - 1. Temporary Seeding or Stabilization.
 - 2. Permanent Seeding, Sodding, or Mulching.

3.5 SEEDING

- A. Do not perform seeding in windy conditions.
- B. Seeding shall be dispersed in 2 directions at right angles to each other.
- C. Permanently seed and mulch cut and fill slopes as construction proceeds to extent considered desirable and practical. In the event it is not practical to seed areas, slopes shall be stabilized with straw mulch and tackifier, bonded fiber matrix, netting, blankets or other means to reduce the erosive potential of the area.
- D. Seed lawn areas by sowing evenly with approved mechanical seeder at rate of minimum of 150 pounds per acre. Culti-packer or approved similar equipment may be used to cover seed and to form seedbed in one operation. In areas inaccessible to culti-packer, lightly rake seeded ground with flexible rakes and roll with water ballast roller. After rolling mulch with straw mulch at the rate of 2 tons per acre.
- E. Surface layer of soil for seeded areas shall be kept moist during germination period. Water seeded areas twice first week to minimum depth of 6 inches with fine spray and once per week thereafter as necessary to supplement natural rain to equivalent of 6 inches depth.

3.6 SODDING

- A. Cut and lay sod on same day. Only healthy vigorous growing sod shall be laid.
- B. Lay sod across slope and tightly together to result in solid coverage free of gaps.
- C. Roll or firmly but lightly tamp new sod with suitable wooden or metal tamper sufficiently to set or press sod into underlying soil.
- D. All finished sodding shall be smooth and free of lumps and depressions.
- E. After sodding has been completed, clean up and thoroughly water newly-sodded areas.

3.7 MAINTENANCE DURING CONSTRUCTION

- A. Begin maintenance operations immediately after each seeding or sodding and continue as required until acceptance. Correct defective work as soon as possible after it becomes apparent and weather and season permit.
- B. Upon completion of the planting operations, clean up landscaped areas to be free of stones, containers, trash, and other waste and debris to leave area in a neat and well-groomed appearance.
- C. After grass growth has started, reseed or sod areas that fail to show uniform stand of grass in accordance with The Drawings and as specified herein. Continue Reseeding and sodding such areas repeatedly until areas are covered with satisfactory growth of grass. Perform removal and replacement

PART 1 GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Storm sewer drainage piping, fittings, accessories.
 - 2. Storm drainage structures.

1.2 REFERENCES

- A. The publications listed below form a part of this specification to the extent referenced. Publications are referenced within the text by the basic designation only.
- B. American Association of State Highway and Transportation Officials (AASHTO)
 - 1. AASHTO M 105 Gray Iron Castings
 - 2. AASHTO M 170 Reinforced Concrete Culvert, Storm Drain and Sewer Pipe.
 - 3. AASHTO M 190 Bituminous Coated Corrugated Metal Culvert Pipe and Arches.
 - 4. AASHTO M 198 Joints for Circular Sewer and Culvert Pipe Using Flexible Watertight Gaskets.
 - 5. AASHTO M 252 Corrugated Polyethylene Drainage Tubing, 3 to 10 Inch Diameter.
 - 6. AASHTO M 294 Corrugated Polyethylene Drainage Tubing, 12 to 60 Inch Diameter
- C. ASTM International (ASTM):
 - 1. ASTM A74 Cast Iron Soil Pipe and Fittings
 - 2. ASTM A185 Steel welded Wire Fabric, Plain, for Concrete Reinforcement
 - 3. ASTM A536 Ductile Iron Casings
 - 4. ASTM A615 Deformed and Plain Billet-Steel Bars for Concrete Reinforcement
 - 5. ASTM A746 Ductile Iron Gravity Sewer Pipe
 - 6. ASTM A760 Corrugated Steel Pipe, Metallic-Coated For Sewers And Drains.
 - 7. ASTM A796 Structural Design Of Corrugated Steel Pipe, Pipe-Arches, And Arches For Storm And Sanitary Sewers And Other Buried Applications.
 - 8. ASTM A798 Factory-Made Corrugated Steel Pipe For Sewers And Other Applications.
 - 9. ASTM A929 Steel Sheet, Metallic-Coated By The Hot-Dip Process For Corrugated Steel Pipe.
 - 10. ASTM C76 Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
 - 11. ASTM C150 Portland Cement
 - 12. ASTM C206 Finished Hydrated Lime
 - 13. ASTM C443 Joints for Circular Concrete Sewer and Culvert Pipe, Using Rubber Gaskets
 - 14. ASTM C564 Rubber Gasket for Cast Iron Soil Pipe and Fittings
 - 15. ASTM C969 Infiltration and Exfiltration Acceptance Testing of Installed Precast Concrete Pipe Sewer Lines
 - 16. ASTM D3034 Type PSM Polyvinyl Chloride (PVC) Sewer Pipe and Fittings
 - 17. ASTM D3212 Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
 - 18. ASTM F477 Elastomeric Seals (Gaskets) for Joining Plastic Pipe
 - 19. ASTM F949 Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with Smooth Interior and Fitting
- D. UNI-Bell PVC Pipe Association:
 - 1. UNI-B-6 Recommended Practice for Low-Pressure Air Testing of Installed Sewer Pipe.
- E. Washington State Department of Transportation (WSDOT) Standard Specifications for Road, Bridge, and Municipal Construction, 2022 or latest edition.
- F. City of Auburn Engineering and Construction Standards, latest edition.

1.3 SUBMITTALS

A. Product Data: Provide data of pipe materials, pipe fittings, and accessories.

- B. Manufacturer's Certificate: Certify that products meet or exceed specified or local requirements.
- C. Project Record Documents:
 - 1. Accurately record actual locations of pipe runs, connections, catch basins, cleanouts, and invert elevations.
 - 2. Identify and describe unexpected variations to subsoil conditions and location of uncharted utilities.
- D. Shop Drawings: Indicate reference to Construction Drawings of structure locations, elevations, piping with sizes, locations, and elevations of penetrations.

1.4 PROJECT CONDITIONS

A. Coordinate work with termination of storm sewer connection outside of building.

PART 2 PRODUCTS

- 2.1 SEWER PIPE, FITTINGS, AND JOINTS
 - A. Pipe and joint materials specified below for storm drainage shall be strictly limited to the extent shown or allowed on the drawings or as specified in Part 3 hereinafter.
 - B. Pipe materials for pipes 12 inches in diameter or greater shall conform to Section 7-04 of the City of Auburn Engineering and Construction Standards.
 - C. Pipes materials for pipes less than 12 inches in diameter shall conform to 9-05.2(7) of the WSDOT Standard Specifications.
 - D. Subdrains: Perforated, PVC or flexible corrugated plastic pipe as specified herein of the size indicated on the drawings.

2.2 DRAINAGE STRUCTURES

- A. Drainage Structures shall conform to Section 7-05.2 of the City of Auburn Engineering and Construction Standards.
- B. Trench Drain as specified on Construction Drawings or approved equal.
- C. Area drains:
 - 1. Nyoplast by ADS or approved equal.

PART 3 EXECUTION

- 3.1 EXAMINATION
 - A. Verify that trench cut and excavation is ready to receive work and excavations, dimensions, and elevations are as indicated on Drawings.
 - B. Verify items specified by other sections are properly sized and located.
 - C. Verify that built-in items are in proper location and ready for roughing into work.
 - D. Verify that the excavation for structures is correct.

3.2 PREPARATION

- A. Hand trim excavations to required elevations. Correct over excavation with bedding material.
- B. Remove large stones or other hard matter that could damage pipe or impede consistent backfilling or compaction.
- C. Coordinate Placement of inlet and outlet pipe or duct sleeves as indicated on Construction Drawings

3.3 INSTALLATION – PIPE

- A. Install type of pipe shown on the drawings. Where type of pipe material is not shown or restricted on the drawings, provide only RCP or DIP. Installation provisions herein shall apply to the extent as applicable to the pipe and joints allowed.
- B. Inspect pipe for defects and cracks before being lowered into the trench, piece by piece. Remove and replace defective, damaged or unsound pipe or pipe that has had its grade disturbed after laying. Protect open ends with a stopper to prevent earth or other material from entering the pipe during construction. Remove dirt, excess water, and other foreign materials from the interior of the pipe during the pipe laying progress.
- C. Excavate pipe trench and place bedding material in accordance with Section 02300.
- D. Install pipe in accordance with manufacturer's written recommendations.
- E. Corrugated or Spiral Rib Metal Pipe: Install as indicated on the drawings, as recommended by the manufacturer, and in accordance with ASTM A 798 and A 796 as they apply.
- F. Commence installation at the lowest point for each segment of the route. Lay RCP with the groove or bell end upstream. Place riveted CSP with the inside circumferential laps pointing downstream. Repair damaged bituminous coating on CSP by applying bituminous material conforming to AASHTO M190.
- G. Lay pipe to the required line and slope gradients with the necessary fittings, bends, manhole, risers and other appurtenances placed at the required location as noted on Drawings.
- H. Do not displace or damage pipe when compacting.
- I. Do not place pipe in water or when trench conditions are unsuitable for such work.
- J. Joints: Construct joints as described herein and in accordance with manufacturer's installation instructions.

3.4 PRECAST MANHOLE CONSTRUCTION

- A. Place base pad to proper elevation and location and trowel top surface level for placement of manhole barrel.
- B. Place manhole barrel plumb and level to correct elevations and anchor to base pad.
 - 1. After completion of slab foundation, lower first joint of manhole barrel into position, grooved end first, and set level and plumb on concrete base. Align and adjust to proper grade prior to placing and forming invert. Pour invert immediately after setting of first section of manhole barrel.
 - Prior to setting subsequent manhole barrel sections, apply primer to tongue and groove ends and allow to set in accordance with manufacturer's recommendations. Place joint sealant on tongue end. Lower next section into position, and remove excess material from interior of structure. Add additional material on exterior of joint, if necessary, for completely watertight joint.
- C. Set cover frames and lids level without tipping, to correct elevations. Utilize pre-cast rings or brick and mortar to achieve final rim elevation. Maximum limit, 4 courses.

3.5 SUBDRAINS

A. Install subdrains in accordance with the details and at the locations shown on the drawings.

3.6 INSPECTION AND TESTING

- A. General:
 - 1. Clean, inspect, and test storm sewer systems and culverts, upon completion or at such time as directed. The system or culvert shall have a true grade and line. Actual elevations shall be within 0.08 feet of the elevations given on the drawings.

- 2. After completion of the Work, or any part thereof, the job shall be tested to determine that it has been installed in accordance with the drawings and specifications. In general, the Work shall prove to be in good condition, installed in accordance with the drawings and specifications and ready for use.
- B. Cleaning and Testing:
 - 1. Visibly inspect and remove all debris and obstructions from storm pipe.
 - 2. Test for infiltration and exfiltration by hydrostatic testing per ASTM C 969. Manholes and pipe shall conform to ASTM C 969 leakage criteria.
- C. Alignment Test: After backfill has been placed and compacted to a depth not less than one foot above top of pipe, a visual inspection shall be made by flashing a light between manholes. Correct displacement or misalignment of invert.